manpower

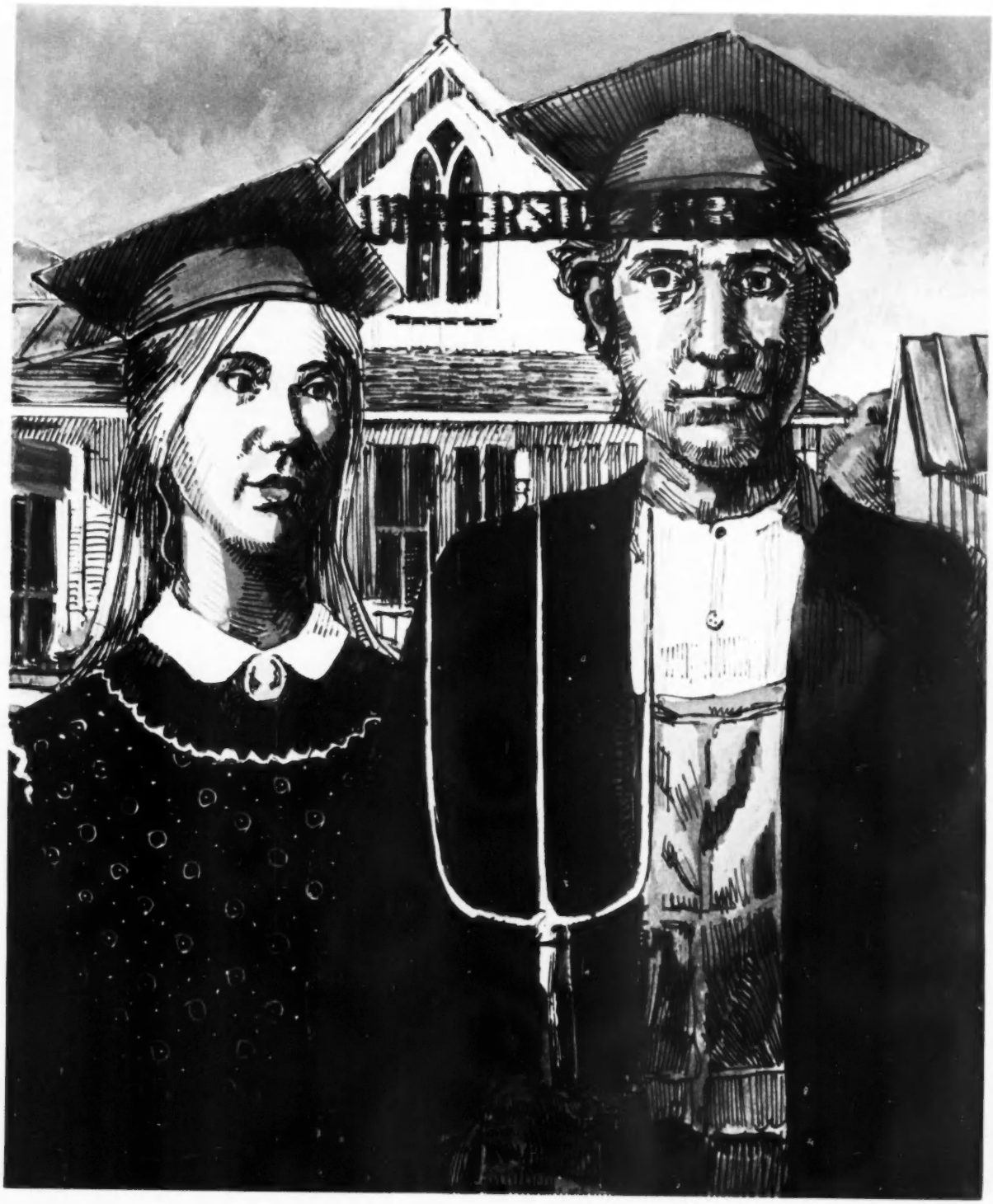
august 1973 U.S. DEPARTMENT OF LABOR MANPOWER ADMINISTRATION

Soc. Sci.

P

AUG 21 1973

The Work Ethic on Campus



manpower
volume 5 number 8
U.S. DEPARTMENT OF LABOR
MANPOWER ADMINISTRATION

Coaxing Training Habits Downstairs

"Habit is habit," Mark Twain once observed, "and not to be flung out of the window by any man, but coaxed downstairs a step at a time." Habit, perhaps, is what originally propelled the Human Resources Research Organization (HumRRO) along conventional paths when it was asked by the Army to suggest better ways of training military technicians.

Working with field wireman trainees—men who install and maintain communications lines and equipment—HumRRO attacked the problem by dividing the men into what is sometimes described as fast and slow learners. To teach the alleged slow learners, training materials were developed that relied on visual presentations and the spoken word, rather than written texts. The payoff was small. Those whose backgrounds and educational profiles indicated that they would master the course did; those calculated not to progress well under traditional methods didn't do well with the methods custom tailored for them either.

Along the way, however, HumRRO came upon a method that seemed to succeed with all trainees. Students who had successfully completed one aspect of the course were assigned to teach what they had just learned to new trainees. This so-called peer instruction was on a one-to-one basis —one instructor to one trainee. The idea of permitting students to teach students took some getting used to, but the initial impressive results were confirmed by a more extensive test.

As a result, the Army is now in the process of coaxing some of its old training habits downstairs a step at a time. Five Army bases are using peer instruction to train field wiremen, and the technique is being extended to training for other jobs.

MANPOWER contributing editor Tim Larkin has taken a look at peer instruction—Army style—and in an article beginning on page 15 he describes how it works. Why it works is another matter. And that, it seems, remains something of a mystery.

Ellis Rottman

XU

manpower
volume 5 number 8
U.S. DEPARTMENT OF LABOR
MANPOWER ADMINISTRATION

Coaxing Training Habits Downstairs

"Habit is habit," Mark Twain once observed, "and not to be flung out of the window by any man, but coaxed downstairs a step at a time." Habit, perhaps, is what originally propelled the Human Resources Research Organization (HumRRO) along conventional paths when it was asked by the Army to suggest better ways of training military technicians.

Working with field wireman trainees—men who install and maintain communications lines and equipment—HumRRO attacked the problem by dividing the men into what is sometimes described as fast and slow learners. To teach the alleged slow learners, training materials were developed that relied on visual presentations and the spoken word, rather than written texts. The payoff was small. Those whose backgrounds and educational profiles indicated that they would master the course did; those calculated not to progress well under traditional methods didn't do well with the methods custom tailored for them either.

Along the way, however, HumRRO came upon a method that seemed to succeed with all trainees. Students who had successfully completed one aspect of the course were assigned to teach what they had just learned to new trainees. This so-called peer instruction was on a one-to-one basis —one instructor to one trainee. The idea of permitting students to teach students took some getting used to, but the initial impressive results were confirmed by a more extensive test.

As a result, the Army is now in the process of coaxing some of its old training habits downstairs a step at a time. Five Army bases are using peer instruction to train field wiremen, and the technique is being extended to training for other jobs.

MANPOWER contributing editor Tim Larkin has taken a look at peer instruction—Army style—and in an article beginning on page 15 he describes how it works. Why it works is another matter. And that, it seems, remains something of a mystery.

Ellis Rottman

articles

2 **The Work Ethic on Campus** Lillian Craig Harris
Study says graduates' employment expectations often clash with labor market realities

8 **Opening Job Doors for Mature Women** Diana McClelland
Federal agencies exploring ways to give them upward mobility

15 **Peer Teachers: More Than Equal** Timothy Larkin
Army expands use of trainee instructors after successful test with wiremen

22 **A Trailblazer Looks Back** Susan Percy
Black pioneer in Jacksonville Employment Service has seen many changes in race relations

24 **Corporate Attitudes Toward Young Workers** Patricia Marshall
Study finds few major firms have specific youth employment policies

30 **Youth Corps Launches Teaching Career**
Self-described "pusher for business studies" returns to school where she was a student

departments

13 **News & Notes**

29 **Words & Figures**

31 **Book Reviews**

32 **Publications**

COVER: Richard Mathews, Arts and Graphics Division, U. S. Department of Labor.

Peter J. Brennan
Secretary of Labor

William H. Kolberg
Assistant Secretary for Manpower

Ellis Rottman, *editor*
Emil Michael Aun, *associate editor*
Patricia Marshall, *assistant editor*
Timothy Larkin, *contributing editor*
Richard Mathews, *art director*
Ann Schreitz, *associate art director*

MANPOWER Magazine is the official monthly journal of the Manpower Administration, U.S. Department of Labor. It is distributed without charge to personnel of the national and regional Manpower Administration offices and, by special arrangement, to State employment security agencies. It is also available on subscription at $5.50 a year (single copies 50 cents) from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. In countries other than the United States, Canada, and Mexico, annual subscription is $7.00. The Secretary of Labor has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this Department. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through October 25, 1973.

Expressions of opinions in articles by authors do not necessarily represent the views of the U.S. Department of Labor. Correspondence regarding articles should be addressed to the Editor, MANPOWER Magazine, Manpower Administration, U. S. Department of Labor, Washington, D.C. 20210.

CHANGES OF ADDRESS: Send new address, including ZIP code, to Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Please also include old address label from MANPOWER.

The Work Ethic on Campus

by Lillian Craig Harris

XU

HMM!
HMM!
HMM!
59

Study Says Graduates' Employment Expectations Often Clash With Labor Market Realities

American colleges and universities and their students have undergone some obvious changes over the past decade. Coed dormitories scarcely raise an eyebrow today. Jeans are a sartorial staple for both sexes. And the star quarterback may have longer hair than the drum majorette.

But despite considerable speculation to the contrary, today's college students view work in much the same way as did their counterparts of the early sixties. Today, as 10 years ago, graduating college seniors see work as having an important role in their lives, says David Gottlieb, chief researcher in a study of 1972 college graduates. There is a difference, however.

"A 1961 study of college seniors was called 'Great Aspirations,'" explained Gottlieb. "This one might be called 'Great Expectations.'"

Students Interviewed

Gottlieb, a professor of human development at Pennsylvania State University, expresses concern with what his study report, *Youth and the Meaning of Work*,[1] reveals as a growing gulf between student career expectations and the actual job market situation. The study—done under contract with the Manpower Administration—involved 1,860 students who graduated in June 1972 from five Pennsylvania colleges. It was undertaken basically to determine how graduating college seniors view their future employment. The researchers sought answers to whether attitudes toward work are changing in America and whether society is confronted by a growing problem of worker alienation.

In-depth personal interviews combined with a 32-page questionnaire were used on a student sample that was as typical as possible of the national college population. Nearly 90 percent of the respondents were white; the rest were black. Some four-fifths were 21 or 22 years old at the time of the survey, and approximately half were female, and a majority were education majors.

While the average parents' income centered around $10,000 to $15,000, several significant findings of the report deal with students from lower socioeconomic backgrounds.

The study reveals that although the 1972 graduates were aware that the existing job market was tight and that many recent graduates were unable to get work specifically related to what they had studied in college, most felt they eventually would find interesting jobs related to their skills and training. Nearly three-fourths of the men and one-third of the women expected to be earning salaries of $12,000 or more within 5 years.

"They come into the labor market with positive expectations. We should not try to reduce these expectations, but to meet them," Gottlieb said.

Wherever possible the researchers sought to compare students graduating in 1972 with those questioned in earlier studies. The 1961 National Opinion Research Center study of American college seniors was used most frequently. In both studies most students placed little emphasis upon the importance of social prestige or material possessions and stressed the importance of altruism and of jobs which would offer opportunity for self-growth, individuality, and creativity.

Differences between the students tested in 1961 and 1972 appear to be mainly a matter of degree. Last year's graduating seniors placed less emphasis on career earnings and more on work which would benefit others and be of use to society, the study says. They were less likely to express need for social status, prestige, and positions of business leadership. The careers they sought were more likely to be in professions oriented to helping people.

The class of 1972 also was more likely to claim no current religious affiliation and no political preference or affiliation. However, in both studies and despite significant student involvement in the social issues of the years in between, there were few students at the extreme ends of the political spectrum. In both studies most students saw themselves as liberals or moderates, but the more recent study contains a much larger proportion of students who viewed themselves as political independents or persons with a more eclectic political attitude.

Despite the current stereotype of the typical college student blithely "doing his thing," there seems to be less emphasis today on the need to be "original and creative" and more interest in use of special skills and abilities, the report says. However, today's college graduates do want jobs which will let them maintain their individuality.

Family Ties Stressed

As part of this latter emphasis, the 1972 respondents seemed more commited than students of 10 years ago to the belief that friendships and family relationships must not be sacrificed or placed in a secondary position to career or work.

The graduates of 1972 see themselves as being far less concerned than their parents with earnings and security and much more concerned with the nature and purpose of work. Not surprisingly, students who are the first in their family to attend college are more likely to want a lifestyle different from their parents—who are usually of a lower socioeconomic

---

Lillian Craig Harris is a freelance writer.

[1] *Youth and the Meaning of Work* is available from the National Technical Information Service, Operations Division, 5285 Port Royal Road, Springfield, Va. 22151 for $6 for a paper copy and 95 cents for microfiche (specify accession number PB 217360). Please enclose payment with order.

'...today's college graduates do want jobs which will let them maintain their individuality.'

background than the college graduate expects to be.

Gottlieb sees these attitudes as healthy evidence of coming social change in America. "Not a 'greening of America,' " he says, "but a gradual change, a hopeful change in interpersonal relationships is taking place. Things may look the same on the outside, but there is a turning inward, a form of privatism."

Confronted by their powerlessness and loneliness in modern society, young people appear to be turning to "making models on a smaller scale" of how life should be lived, Gottlieb says. "Perhaps what we see is a turning from attempts to change the Nation-State to change on the personal level."

In all this, attitudes toward work are indicative of an individual's outlook on style of family life, types of employment expected or "needed," and willingness to "fit in" to traditional or typical employment patterns. The chief factors that create different student opinions about work are sex, socioeconomic background, and ethnic-religious orientation, the study says.

Women's liberationists will find plenty of material in the report to substantiate their claims that sexist attitudes still prevail throughout society, causing women as well as men to see women as less capable and often denying jobs to women on the basis of sex. The researchers found that women see fewer postcollege alternatives, are more limited in career range expectations, and are more likely to accept lower prestige schools. Women also are less likely to attend graduate school and, even though they often try harder, are less often successful in obtaining jobs for which they have been college trained.

According to the report, women place less emphasis on career choice since many expect long periods of absence from the labor market. This leads them to select careers which allow easy movement in and out of jobs. Women, therefore, tend to enroll most heavily in education, social work, nursing, and other fields in which jobs traditionally have been held by women and, partly for this reason, offer lower salaries.

"Regardless of the field of study or time period, women hold lower salary expectations," the report points out. Seven of 10 of the men graduates but only 3 of 10 of the women expect that after working 10 years they will be earning more than $15,000.

A sex role attitude index compiled as part of the study reveals that 82 percent of the respondents believe that, "In general, the physical characteristics of women make them unqualified for some types of work which are generally available to men." Some 24 percent of the women respondents said they expect to encounter sex discrimination in employment.

Black women, most of whom came from lower socioeconomic backgrounds, were the women most likely to endorse the more traditional women's role concepts. Women from poorer families tended to "place more emphasis upon a stable and secure future" and less em-

'...82 percent of the respondents believe that, "In general, the physical characteristics of women make them unqualified for some types of work which are generally available to men."'

phasis on the importance of variety in their work and of opportunity for career advancement.

Both men and women from higher socioeconomic backgrounds tended to attach relatively greater importance to interesting work than to security as compared with students from less advantaged families. Overall, the statement, "To me work is nothing more than a way of making a living" was agreed to by 21 percent of the men and 14 percent of the women.

The report emphasizes that persons from poorer families not only have less freedom in choice of a college, but the colleges they attend further restrict their career choices and mobility by offering fewer majors. Usually these majors are in education, the social sciences, and similar fields which tend to lead the graduate into lower bracket white-collar jobs. Further, persons from lower socioeconomic backgrounds are much less likely to attend graduate schools.

Access to Jobs Unequal

"As a result," the report says, "although these students do complete college, their access to higher status occupations and higher salaries is not equal to that of more affluent students. It is clear from our data that equality in occupational choice is not achieved by the single act of open college admissions. The concentrating of lower income youth in educational settings where few career alternatives are provided does not really enhance occupational equality."

Sections of the study relating to ethnic-religious background show the Protestant work ethic still alive and well in the hearts of contemporary youth. They also explore the relationship that exists between religious affiliation and attitudes toward work.

Of the total sample, 2 out of 3 students maintained their original religious affiliation throughout college, with Jewish students having the lowest rate of defection —20 percent as compared with 33 percent for Protestants and 31 percent for Catholics.

Fifty percent of the respondents considered themselves "fairly religious," 20 percent "very religious," and only 6 per cent "very nonreligous."

Present religious preference was found to be closely related to personality and attitudes toward work. Protestants were the least likely to be, by personal description, "hostile, alienated, and unhappy." This description applied most frequently to those who claimed no religious preference, but this latter group also was by far the most likely to call itself "analytical, insightful, and intellectual."

Respondents with no religious preference (272 men and 224 women) were reported to be "not nearly as work-oriented as the other groups," and "by far the most likely to exhibit concerns over whether their job will be boring and uncreative." Conversely, "the two factors 'success oriented through hard work' and 'I like work' are very positively related to being Protestant, somewhat postively related to being Roman Catholic, somewhat

'Today's college graduates, to judge from the report, attach great importance to the family.'

negatively related to being a male of the Jewish faith, and highly negatively related to having no religious preference," the report says.

German Protestants scored highest on acceptance of the Protestant work ethic. They joined male Anglo-Saxon Protestants in believing most often that work is a means of making oneself a better person.

Irish Catholic women were most likely to see work as mainly a means of earning money, while Anglo-Saxon Protestant women were most rejecting of the idea that work is primarily a means of accumulating money.

Male Jews and male Anglo-Saxon Protestants expressed least concern about their work being boring or uncreative. Irish Catholic women and both men and women with no religious preference expressed the greatest concern over the job setting, the first group for financial reasons and the second from fear they would not be allowed expression of creativity and individuality.

Today's college graduates, to judge from the report, attach great importance to the family. Asked to select the first, second, and third most important factors in defining lifestyle, 70 percent of the students put "good family relations" among the top three and 52 percent put it first. The factors next most often listed were "good friends" (45 percent), "freedom from financial worry" (44 percent), "freedom to pursue own interests" (36 percent), and "opportunity for meaningful work" (30 percent).

Despite the emphasis on family life, the report points out that "The traditional pattern of marriage, the wife working only a short time or not at all, and then relatively immediate childbearing, does not appear to be the typical picture." Rather, women respondents foresaw long periods of employment before and after marriage and many did not plan to have children for several years. Of all respondents who said they intended to marry, more men than women said they planned to become parents.

When asked what they considered the ideal relationship between family and work, the largest proportion (56 percent) selected the alternative, "I expect that it will be necessary for my family and my home life to be somewhat affected by and to adapt to my career needs."

However, 31 percent selected, "I don't expect my career work to interfere with or influence my relationship with my family or my home life." According to Gottlieb, this expectation is evidence of a high degree of privatism or separation of outside activities from those of the home and is another indicator of the degree of importance attached by the respondents to family life.

"Most people like to work" was disagreed with either mildly or strongly by 42 percent of the men and 46 percent of the women. The report says this indicates that "many students have encountered people who did not exhibit enthusiasm about their work status." Nevertheless, most of the students said that they per-

'...most of the respondents found themselves "without jobs or job leads at the time of college graduation."'

sonally liked to work and were eager to begin their career, although they did not place their careers above their desire to achieve and maintain strong family relationships.

Many students said that after graduating they felt a need for a time of relaxation to "get it all together" before going into the job market. Part of this, the researchers believe, was simply due to weariness after 4 years of studies.

However, the researchers criticized the apparent failure of the college environment to provide opportunities and experiences that would enable students to resolve problems of self-identity and relationships with others. Many students appear to graduate from college still insecure "in their feeling about themselves and their relationships with others." Inadequate career counseling is related to this problem, the researchers contend.

Despite expressed preference for travel or taking it easy for a while, the majority of students indicated they would be seeking work during the coming year. Of all those surveyed, 37 percent of the men and 61 percent of the women (most of them in education) said they expected to find jobs in their fields, and 11 percent of the men and 10 percent of the women believed they would be employed outside their major field of study.

Thirty-two percent of the men and 18 percent of the women expected to continue on to graduate school, either full or part time.

The major barrier to job attainment—seen by 81 percent of the students—was the "tight job market." In second place was the need to find a job with desirable characteristics. "Adequacy of my skill qualifications" and "adequacy of my educational qualifications" followed.

Based on the study findings, Gottlieb sees an urgent need for colleges and universities to attune more closely to what is happening in the world of work.

"Trainers don't know what is going on out there," Gottlieb claims. "Despite the difficulty of predicting what jobs will be most in demand within 4 years, more counseling and guidance is needed."

Failure of their schools to provide adequate career guidance was a chief student complaint. "It would appear," the report says, "that most faculty in most colleges do not see that providing vocational training, guidance and counseling, and career information is a major part of their academic role."

When asked how aware they were of the job market for their chosen field when they selected their college major, 61 percent of the students said they knew little or nothing of job opportunities. Some 68 percent believed that at the time of their graduation there were fewer jobs available in their field than when they selected a major.

The study report emphasizes that the difficulty of switching majors, a difficulty built into the American system of higher education, limits student choices. The longer a student waits, the greater the penalty for switching from, say, history to marine biology. Since pressures are applied early to students to select a major, many appear to make premature choices with inadequate counseling, the report contends.

Most Lacked Job Leads

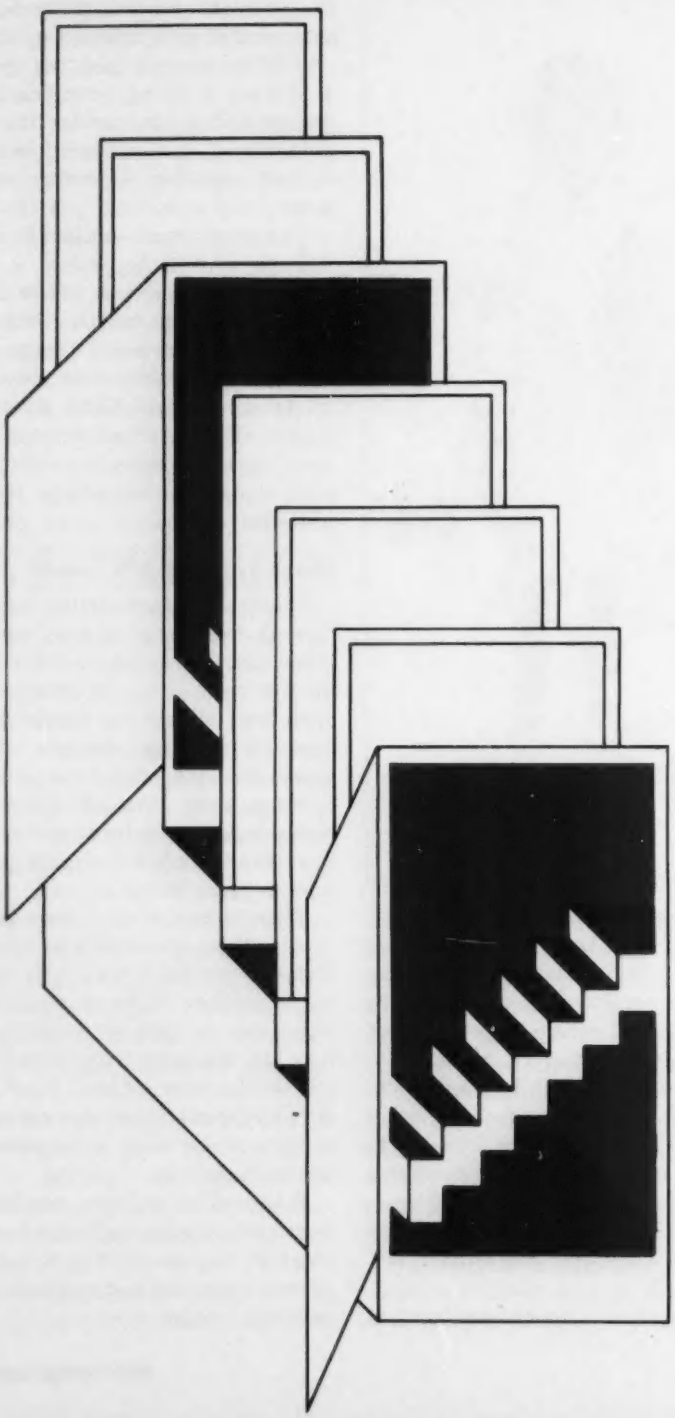
Nearly 20 percent of the respondents claimed they would change their major if they had their college experience to live through again. This, the researchers say, appears to indicate that despite their high expectations, large numbers of young people face the job market with apprehensions about their skills and with a probable preference for employment other than that for which their college education prepared them.

"Few students seem to have been provided with an opportunity to explore and discuss postcollege career futures," the report declares. "What career information does come to students is usually in the form of announcements posted by the college placement office." Thus most of the respondents found themselves "without jobs or job leads at the time of college graduation."

If American colleges continue their "noncareer orientation," the researchers conclude, they are unlikely to have a significant impact on students' career choice or career change. □

Opening Job Doors for Mature Women

by Diana McClelland



As the impact of the women's movement is felt, doors to good jobs are opening for ambitious and able women—especially if they are young. However, for another large group of women workers, the doors are not opening so readily. These are mature women who for years have been trapped in jobs beneath their abilities or who left their jobs for marriage and children and now are reentering the world of work. Many support families and work primarily because of financial need. Certainly, these women should not be forgotten while younger ones advance.

A large number of mature women work for the Federal Government. In 1971, nearly 416,000 Federal employees—about 20 percent of the total—were women 40 years old or older, according to the U.S. Civil Service Commission (CSC). Many of these women have a substantial number of years ahead of them in the work force. Research for the U.S. Labor Department's Manpower Administration has shown that the work life expectancy of women who are 40 years old, married, and whose families are complete is about 19 more years. For those who are underutilized, it is time enough in which to get a fresh start toward a new career.

How do women fare in Federal employment? Recently, the CSC reported that the number who are in jobs with starting salaries above $16,000 rose by 466 between October 1971 and October 1972. Despite this increase, women have only 5.6 percent of these top civil service jobs and most women white-collar workers are clustered at the bottom of the pay scale in clerical and secretarial jobs (see chart). Women make up 70 percent of the workers in these positions.

Diana McClelland, formerly an intern in the Federal Women's Program, is now a management analyst in the U.S. Civil Service Commission.

The latest information on the ages of Federal workers at various pay levels was published in 1963 by a committee of the President's Commission on the Status of Women. It was clear from this data that women were having a far more difficult time moving up the Government's job ladder than were men. In the mature age ranges, women were older than men at each pay level and had more years in Government employment, even when military service was used in the computation.

This pattern of lower pay and slower job advancement by women is typical of the U.S. work force as a whole. The Women's Bureau of the U.S. Department of Labor reports that, on the average, women who work full time the year round earn only about three-fifths of what men do. And this is so despite the fact that the average woman worker is as well educated as the average man worker —the median for both groups is 12.4 years of school. In fact, when grouped by level of education, the only women to surpass men in median income are college graduates. The group they surpass is made up of men who finished the eighth grade but did not finish high school.

Research Confirms Status

Research underway for the Manpower Administration by Ohio State University's Center for Human Resource Research tends to confirm the unfavorable position of the mature woman. Early study reports showed that a sample group of women at ages 14 through 24 were at the same or higher level on the job ladder as women 30 to 44 years old. In the older group, nearly a third of the women had not progressed beyond the jobs of their youth. And among all married women with children in this group—including those who always have worked—20 percent of the whites and 11 percent of the blacks moved down in occupational status from their longest premarital job to their most recent job.

Further evidence of the relatively poor status of mature women in the job market is revealed in unemployment statistics. According to the Women's Bureau, the unemployment rate in 1972 was 3.8 percent for women aged 40 through 64 compared with 2.8 percent for men in the same age brackets.

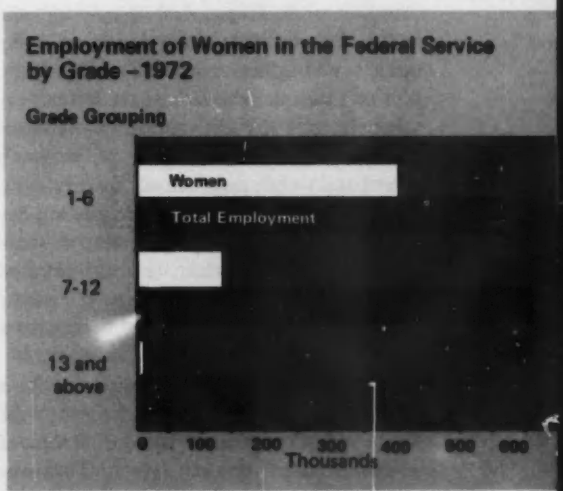
The Women's Bureau also says that "hidden" unemployment may be especially great among older women. Since only persons who are both out of work and seeking work are counted as unemployed, no account is taken of those who gave up hunting a job because it seemed hopeless. Of 415,000 women 45 years of age and over who were reported as unemployed in 1972, about 18 percent had been looking for work for 6 months or more. Many thousands of others may have given up this search. According to a January 1973 report of the U.S. Department of Labor's Bureau of Labor Statistics, there were 79,000 women 60 years of age and over who wanted to work but were not seeking employment because they did not think they could find a job.

To deal with all facets of sex discrimination in Federal employment, the Federal Women's Program was set up in 1967. Administered by the CSC, the program was instituted as a result of an Executive order prohibiting discrimination against any employee or job applicant because of sex. This was an amendment to a previous order prohibiting discrimination for reasons of race, color, religion, or national origin. Today, each agency has a Federal women's program coordinator or committee chairperson who acts as an advisor to the agency head concerning employment of women, distributes program information to employees, and serves as a contact with the CSC and other agencies.

Enforcement teeth were added to executive fiat against discrimination in Federal employment by the Equal Employment Opportunity (EEO) Act of 1972. Under this legislation, the CSC requires agency heads to file affirmative action plans spelling out how they intend to improve the status of women and minority group members within their organizations. Also, an EEO complaint system has been established so that Federal employees who feel they have been subject to discrimination can seek redress through their agency, through the CSC, and, if necessary, through the courts.

The present EEO legal framework does not cover age discrimination in the Federal Government. However, President Johnson issued an Executive order and Presidents Kennedy and Nixon issued memoranda declaring it public policy not to discriminate for reasons of age. In President Nixon's words:

"As the largest employer in the Nation, the Government has a special responsibility to take the lead in eradicating age discrimination from the world of employment. . . . I want to emphasize that our



Margaret Gibson, who supervises a new patent application and monitoring system in the U.S. Patent Office, consults a file of trademark applications. Mrs. Gibson started working for the Federal Government 29 years ago as a clerk typist. Her latest move up in pay and responsibility came as a result of completing a 2-year Department of Commerce administrative training program.

older citizens deserve the chance to contribute. . . . We must not tolerate any practice that denies older citizens fair and full consideration for employment and advancement in the Federal Service."

But as matters stand, if mature persons in Government feel they are subject to age discrimination, their only recourse is to file a grievance using their agency's internal procedures. The Age Discrimination in Employment Act of 1967 has already made such discrimination illegal in private industry, although it has proved difficult to enforce this Act. Legislation under consideration would add a new section to this Act to cover Federal employment.

Stereotypes Persist

Age discrimination in employment, whether against women or men, occurs prmarily because there are many prevalent stereotyped ideas about older workers. Often, such persons are thought to be hard to train and to have poor attendance records and a high turnover rate. So, they are not hired, or if already employed they are not considered for training programs which could mean career advancement. These views persist despite solid evidence that mature persons make good—and often superior—employees.

For example, the Women's Bureau reports in its 1969 HANDBOOK ON WOMEN WORKERS that nationally ". . . women's occupation-changing had an inverse relationship with their length of time on the job. Of those with 1 year or less of service, 36 percent made an occupational change; of those with over 10 years' service, less than 1 percent made a change."

Similar findings were turned up in a CSC study, summarized in the report of the 1963 Commission on the Status of Women. The report says, "Turnover rates decline steadily for both men and

Systems accountant Sue Mundstuk and Irvin Coker, deputy assistant secretary for finance of the U.S. Department of Health, Education, and Welfare (HEW), go over a chart showing how HEW grants flow to the States. HEW's Professional and Executive Corps Program enables the agency to put to use the education and training of Mrs. Mundstuk and other professional women who want to work part time.

A complex problem in how to credit certain periods of employment for Federal retirement purposes gets the attention of Esther Ferguson and Gertrude Vaughn. Both are claims examiner trainees at the U.S. Civil Service Commission.

About 2 years of training are required before these Civil Service Commission employees will be considered independent adjudicators of claims for Federal retirement benefits. Most of the women in the claims examiner training program came up through the ranks in the Federal service.

Labor Dept. photos by Billy Rose

women from their early twenties to the early fifties, at which age the rate for women is about one-sixth the rate for women in their twenties."

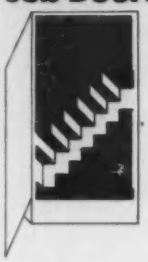
A CSC study of the use of sick leave by Federal employees also showed strong job attachment among mature women. CSC found that women between 41 and 60 used less sick leave than younger women. Moreover, two groups of women used less sick leave than their male counterparts. These were women 60 years of age and over, and women with more than 30 years of Federal service.

But, faithful though they may be to their job responsibilities, can mature persons be trained for new and more difficult assignments? Research for the 1971 White House Conference on Aging turned up evidence that age apparently is not a barrier to learning. Middle-aged persons, the researchers found, can learn well in comparison with young adults.

Also, the researchers cite several longitudinal studies which show that on tests measuring conceptual thinking people tend to do better as they grow older. One of these studies found that, on the average, participants at age 50 bettered their performance on a general intelligence test over their performance as first year college students. Generally, 61-year-olds were able to chalk up similar results. Their only decline was in tests of numerical ability.

Industry studies also show that mature workers are capable workers. A 1960 report by the Industrial Relations Division of the National Association of Manufacturers, for example, notes that mature workers may learn differently, but they learn as well as the young. Through experience, the report says, the older worker has cultivated an ability to select, evaluate, and grasp basic principles.

To improve the job opportunities of older women, a number of efforts are



being made in the Federal service which are opening pathways to employment and advancement. Today, mature women who have had secretarial or clerical positions involving substantial responsibility can use this experience in meeting CSC qualifications for entry or mid-level professional and technical jobs in the Government. In addition, credit is given for volunteer work in determining applicant qualifications for such jobs. Volunteer experience is evaluated on its content, level, and relevence to the position being filled.

Also, mature women are being included in the upward mobility programs of some Federal agencies. One of these is the training program for claims examiners at the CSC's Bureau of Retirement, Insurance, and Occupational Health. Some trainees are CSC employees who had little chance for advancement in their previous jobs and who demonstrated a potential for work at a higher level. Mature women make up 33 percent of those selected for training so far, and they have proved successful as both trainees and claims examiners, CSC officials report.

Other mature women with limited opportunities to advance have gained better jobs through an administrative trainee program for both men and women which is now in its second year at the U.S. Department of Commerce. Employees entering this program are screened and selected by a panel of senior administrative professionals, then rotated through assignments in financial management, administrative services, computer technology, personnel, budget, accounting and auditing, and other work responsibilities. In addition, trainees get formal classroom work in administration and management.

In its Professional and Executive Corps Program, the U.S. Department of Health, Education, and Welfare (HEW) operated a small pilot project which explored the use of part-time employment as a way to help women with professional training to return to work after being out of the labor force for some time. Participants in this program ranged in age from under 30 to over 65, with a median of 41. A study made of the program's effectiveness, based on supervisor evaluations, offers some insight into the contribution mature women can make in the Federal service. HEW reports that:

- Seventy-seven percent of the Corps members made some special contribution in their jobs.
- Sixty-four percent had no areas of work deficiency.
- Fifty-five percent were more productive on a work-per-hour basis than full-time employees at the same level.
- Forty-two percent were more productive than other part-time employees at the same level.

Specialists Trained

The Federal Government also has successfully trained mature women who were reentering the labor force for highly specialized jobs in a shortage field. This was in a pilot project begun by the National Institute of Mental Health in 1960 as a means of filling the growing need for mental health counselors. The eight women chosen for training were mothers who had completed college and whose average age was 43. They were given intensive training, including orientation, lectures, outside reading assignments, observation of interview techniques, and supervised work experience at the National Institute.

After training, the women's performance as therapists was evaluated by clinical supervisors and other experts. The performance areas rated included each women's potential for growth, awareness of self, and ability to deal with a patient's anxiety. On a scale that ranged from 1 to 5, the experts rated these trainees as 3.2 (better than satisfactory) to 4.2 (good). Moreover, every woman was offered a job by at least one of the places where she had worked during training.

The 1971 White House Conference on Aging recommended that the Federal Government, along wtih State and local governments, strictly enforce existing antidiscriminatory laws and policies affecting mature workers and jobseekers. In addition, these governments were urged to sponsor educational efforts designed to induce employers to hire older workers.

To meet such calls for action, there is still much that the Federal Government can do to provide leadership in improving the Nation's hiring and employment practices toward older women. The steps that might be taken include:

- Encouraging managers and personnel officials in both private and public employment to reassess their thinking about the potential of mature women workers and job applicants.
- Emphasizing upward mobility training opportunities and job ladders in the Government to facilitate career advancement of capable women who are working at low-pay levels.
- Exploring approaches, such as part-time employment, which will enable women to reenter the work force after having children or after raising their families.
- Providing career counseling, particularly to workers at low-pay levels, to help them assess their abilities and aspirations and to inform them of advancement opportunities.

Through exemplary programs to help mature women, the Federal Government can demonstrate to other employers that it is good management to make the best use of the Nation's human resources, regardless of sex or age. □

XU

News & Notes

About 80 Indians from more than 20 tribes--from Florida to Alaska--will be trained in all phases of water farming in a 9-month course at the Lummi School of Aquaculture. The instructors will be Lummi Indians who have developed an extensive aquaculture project that includes growing salmon, trout, and oysters on their reservation in northwest Washington State. The project, developed by the Lummi Indian Business Council, covers the basic sciences such as chemistry, physics, and biology as they relate to acquaculture. Classroom instruction is combined with extensive laboratory and field work at the training facilities on the Lummi Reservation. Graduates will return to their reservations to promote aquaculture in their own tribes. The Manpower Administration is supporting the project with an investment of $180,000 for training costs. The project also is receiving funds from a number of other Federal agencies.

* * *

Developing improved methods of carrying on construction work in the winter is one of the major goals of a new 3-year demonstration project jointly sponsored by the U.S. Departments of Labor and Commerce. The project will be carried out by the Chicago Construction Coordinating Committee, an organization composed of contractors, unions, and local, State, and Federal agencies in the Chicago metropolitan area. A six-member staff will work under the guidance of the Coordinating Committee.

* * *

A Spanish-English poster informing employees of their rights under the 1964 Civil Rights Act, which prohibits job discrimination in private employment, and under Executive Order 11246, which bans discrimination against employees working on Government or Government-assisted contracts, has been jointly released by the Equal Employment Opportunity Commission and the Department of Labor's Office of Federal Contract Compliance. Copies of the poster are available from the Documents Division, Equal Employment Opportunity Commission, Room 1110, 1800 G Street, NW., Washington, D.C. 20506; or the Office of Federal Contract Compliance, U.S. Department of Labor, Room 220, 711 14th Street, NW., Washington, D.C. 20210.

There were 14.3 million young men and women 16 to 24 years old attending school in the year ending October 1972. Of that number 5.2 million had jobs.

* * *

Delta Airlines has agreed to change employment polices and practices which the U.S. Departments of Labor and Justice charge deny equal employment opportunity to minority and women employees and job applicants. A settlement agreement was negotiated after the Labor and Justice Departments filed a joint complaint alleging that Delta violated the Civil Rights Act and neglected its obligations under Executive Order 11246 by depriving black and female employees and job applicants of equal employment opportunities because of their race, color, or sex. The Labor Department's Office of Federal Contract Compliance estimates that the 5-year corrective action program would open better transfer and promotion opportunities to 7,500 Delta employees. Additionally, Delta agreed to pay the first 1,000 employees transferring to jobs offering better opportunities lump sums of between $200 and $1,000 as compensation for employment opportunities previously denied them.

* * *

Nearly 771,000 women were enrolled in work and training programs administered by the Manpower Administration in fiscal year 1972. Women represented about 40 percent of total enrollment, which reached a record high of almost 2 million.

* * *

The National Committee for Careers in the Medical Laboratory (NCCML) has received a $49,500 grant from the National Institutes of Health to improve coordination between the academic and clinical training of medical laboratory technicians. The grant is financing six training institutes for educators from junior and community colleges and affiliated hospital laboratories where student technicians take their academic and clinical instruction. The NCCML says lab technician programs have grown so rapidly--from 57 in 1969 to 160 at last count--that coordination and timing of academic and clinical aspects have not always been achieved.

News&Notes

A New York City school teacher has won a favorable ruling from the Federal Equal Employment Opportunity Commission on his demand for the right to an unpaid leave of absence to care for a young child. The male teacher argued that women teachers who take maternity leave have up to 4 years to return to work without losing tenure rights. He contended that similar rights should be extended to fathers who want to take child care leave.

* * *

The latest Bureau of Labor Statistics count shows that 21.1 million Americans were members in 1970 of labor unions or employee associations that engaged in collective bargaining. Some 5 million of these union and employee association members were women.

* * *

The Census Bureau reports that wives earned more than their husbands in 3.2 million, or 7.4 percent, of American families in 1970.

* * *

Employment advertisments expressing a preference for younger workers continue to be the most frequent violation of the age discrimination law although the number of such ads decreased in 1972, the Department of Labor has reported. Ads using such phrases as "recent college graduate," "junior executive," "age 18 to 25," and similar terms implying that applicants aged 40 to 65 will not be considered are banned by the Age Discrimination in Employment Act.

* * *

The fact that they live within easy commuting distance has little effect on whether young people attend college, according to "Where Colleges Are and Who Attends: Effects of Accessibility on College Attendance," a report prepared for the Carnegie Commission on Higher Education. The report says that the weak relationship between geographic accessibility and college attendance means that "the case for implanting junior colleges thickly over the landscape probably will have to stand on other grounds." Improving secondary schools, the report argues, "might well yield more benefit, to both the individual and to the society, than adding years of mediocre pseudo college on to our present mediocre watered-down 12-year common schools."

Ivy League schools and the Massachusetts Institute of Technology are helping minority applicants they turn down for admission to enroll at other colleges. David Evans, assistant admissions director at Harvard, said he expects about 1,200 of the applicants rejected by the Ivy League colleges and MIT to accept the schools' offer of placement assistance. He estimated that 80 percent of the group would be blacks, Indians, or Spanish-speaking.

* * *

In Japan, where the 5½-to-6 day workweek is common, a survey of almost 5,000 firms showed that companies with a 5-day workweek had an average attendance rate of 95 percent compared with 92 percent for all the firms included in the study.

* * *

Women account for more than 75 percent of the dentists in Finland, 25 percent of the doctors, and 50 percent of the druggists. Also, most barbers and more than half the bartenders are women.

* * *

The National Urban League has been awarded a $3.5 million Manpower Administration contract under the Apprenticeship Outreach Program to prepare 2,130 minority workers in 42 cities for apprenticeship or full journeyman status in construction unions. Acting as prime contractor, the League will operate through subcontracts with its affiliates. The contract calls for preparing 1,870 youth to pass apprentice entrance exams, and further training for 260 workers with varying levels of construction trade experience to qualify them for full journeyman status and union acceptance.

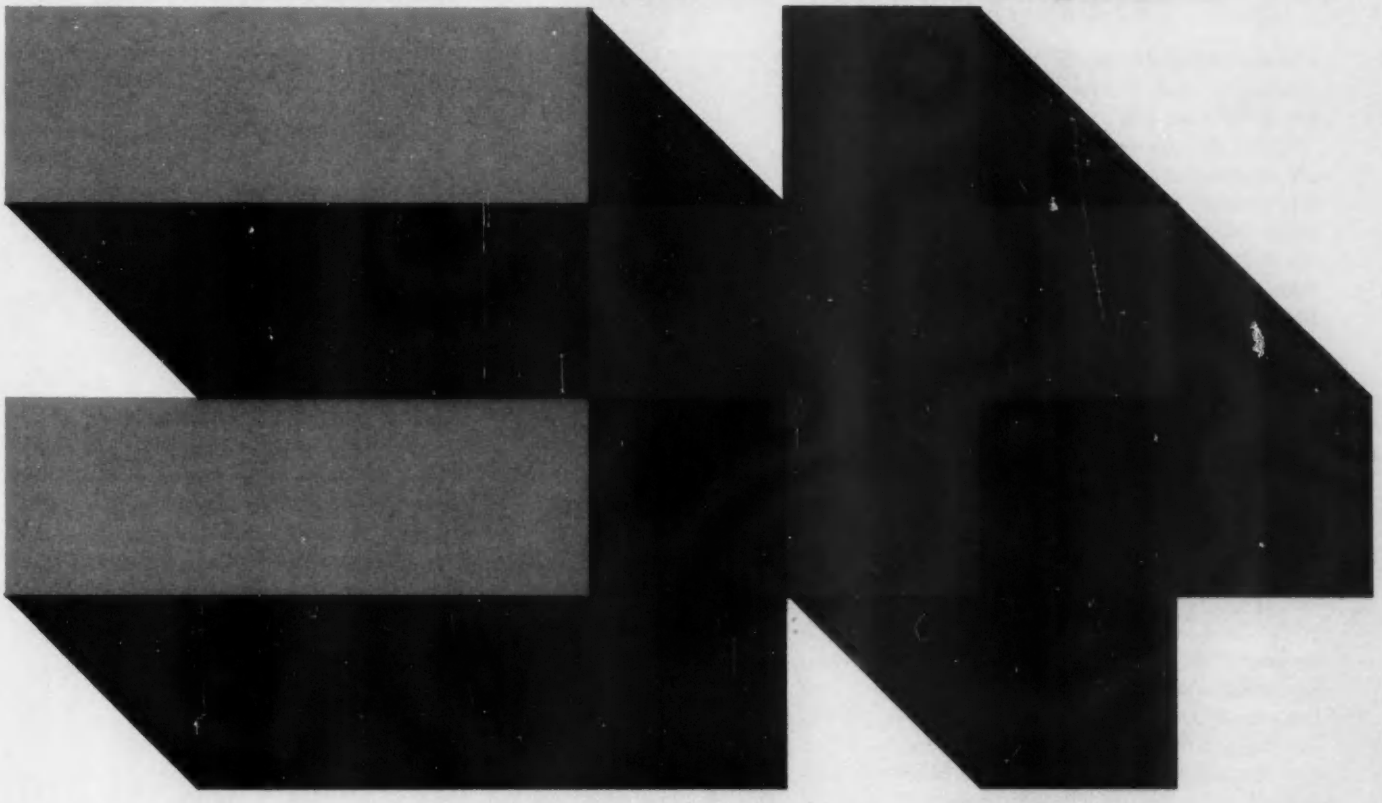
* * *

The proportion of high school graduates who went to college in 1972 was about the same for blacks as for whites, the Bureau of Labor Statistics (BLS) reports. The rate was 47.7 percent for blacks and 49.4 percent for whites. This compares with a 1968 rate of 46.2 percent for blacks and 56.6 percent for whites. BLS also noted that the black dropout rate before high school graduation declined sharply during the past decade--from 33 percent in 1963 to 19 percent in 1972. The dropout rate for whites in 1972 was 13 percent.

XU

Peer Teachers: More Than Equal

by Timothy Larkin



Army Expands Use of Trainee Instructors After Successful Test With Wiremen

" 'Sp.,' 'Run-on,' 'Dang.,' 'Omit,' 'Comma splice,' 'What does this word mean?' 'How do these two paragraphs connect?' 'Have you any evidence to prove this?' 'Capitalize!' 'Colloq.,' 'Too vague,' 'Weak intro.' "

So begins a paper by English teacher K. Anthony Edwards presented at the May 1972 Annual Meeting of the Rocky Mountain Psychological Association. Edwards calculates that between each September and June some 281 million teacher corrections and comments such as these are written in the margins of student papers. Writing them soaks up unnumbered additional millions of teachers' hours.

"Some members of the profession have consequently begun to wonder whether the game is worth the candle," says Edwards. "Do the results of marking papers justify the effort? Research in composition seems to imply that they do not."

Perhaps more than at any time in our history, education is being asked similar searching questions, ranging from whether long accepted methods for particular courses, such as composition, are capable

Timothy Larkin is a contributing editor of MANPOWER.

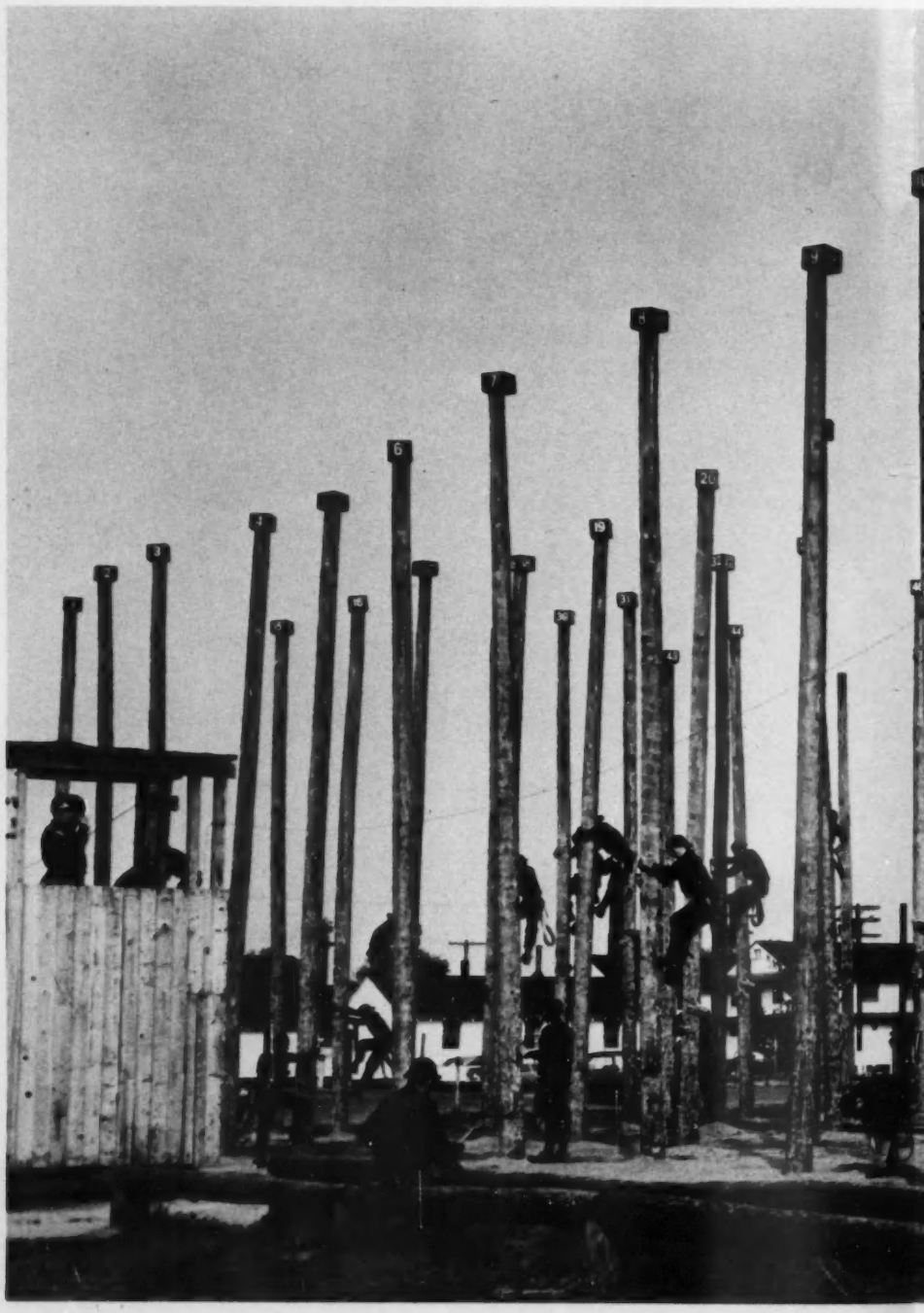
Peer Teachers

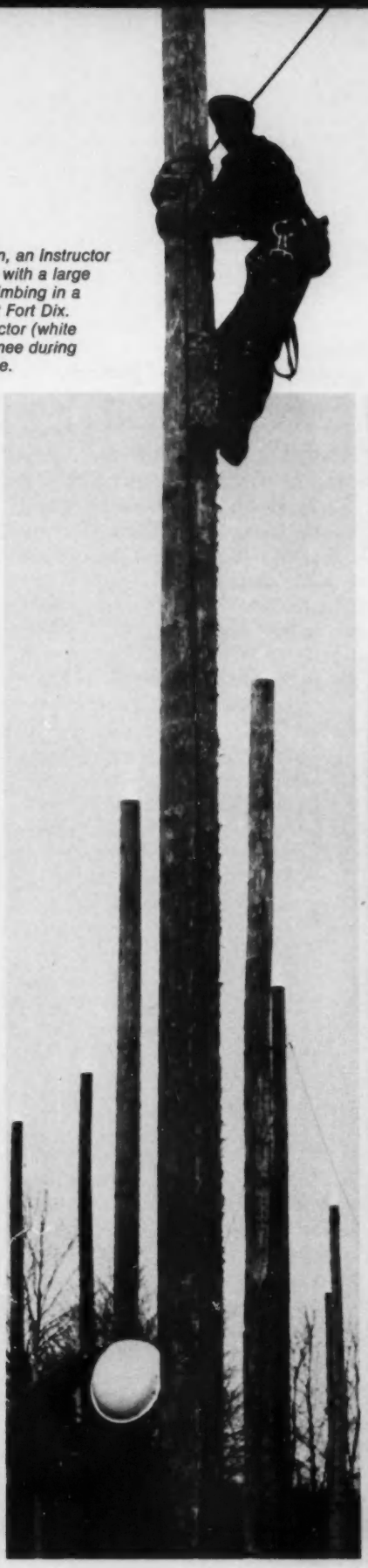
of achieving stated goals, to more basic challenges, such as Ivan Illich's demand for a "de-schooling" of society.

Often the answers to these questions are unexpected and fruitful. The response to Edwards' question was that the students' fellow students, their peers, could do at least as well as the teachers, and often far better, in conveying the essentials of clear composition.

The U.S. Army, with its vast commitment to manpower training, is not immune to this trend toward reexamination of what for long has been the pedagogic equivalent of Holy Scripture. Indeed, those responsible for effective training in the many technical specialities involved with manning a modern army have found ample reason to take a close look at the traditional methods being used to train technicians. For example, much Army training relies on the conventional lecture-demonstration-practice method. But it is questionable whether this method is flexible enough to respond to the great diversity of trainee ability, aptitude, and background. Trainees often range from college graduates to functional illiterates, all of whom have to be taught a considerable amount of complicated material in a short and relatively fixed period of time.

Further, in many instances trainees successfully completing their course work are subsequently found to possess but marginal competence. Failure and repeat rates are high, increasing the cost of training. As a result of this situation, the Army's Office of the Chief of Research and Development began to ask itself essentially the same question posed by Edwards. Was the traditional method worth the candle? To help provide an answer, the Army in July 1968 called upon the Human Resources Research Organization (HumRRO) to investigate the problem and produce recommendations.





Two ways of teaching: Using a bullhorn, an instructor (in wooden enclosure at far left) works with a large group of men who are learning pole climbing in a traditional wiremen's training course at Fort Dix. Under the new method, the peer instructor (white helmet) works individually with the trainee during the skill acquisition phase of the course.

Since he works with only one student at a time, the peer instructor can make his pole climbing instructions specific: "Watch your toes. Keep them pointed up a little while climbing. And remember, the lower leg's got to stay locked. That's it. Right on."

Using the peer instructor as a model, a cadre supervisor points out and explains various items of pole climbing equipment.

Peer Teachers

HumRRO, a nonprofit behavioral science research and development firm headquartered in Alexandria, Va., established what it called Work Unit APSTRAT (an acronym derived from "aptitude" and "strategy") to address this task. The APSTRAT staff set itself three initial goals: (1) to identify or devise a set of instructional principles, methods, and techniques to meet the diverse needs of Army trainees; (2) to develop a complete training system; and (3) to test the system within the "real world" constraints of a typical Army training course.

Audiovisual Aids Designed

The initial APSTRAT approach reflected impeccable logic. If there are those who learn from reading and those who do not learn from reading, then use a different teaching method for each group. This involved designing written programed manuals and instructional booklets for men high on the aptitude scale who preferred to learn and could learn through the written word. For those for whom lectures and reading were ineffective, a battery of audiovisual aids was designed, including programed audio or video tapes, tape-slide presentations, movies, picture books, and games.

To test this alternative media strategy, the APSTRAT staff sought a typical combat support training course from which to develop a model that could be applied to actual training. The test course had to call upon a wide variety of both motor and cognitive skills and had to include trainees with greatly differing aptitudes.

The field wireman course being taught at Fort Ord, Calif., was found to meet both these requirements. The course—which involves establishing telecommunications facilities under battlefield conditions—requires mastering a variety of physical and mental skills. In addition, it includes a fear-inducing task: Pole climbing.

Of equal importance, the field wireman trainees include a large and growing proportion of men in the lower part of the Army's Mental Category Spectrum—Category IV. In 1972, 40 percent of the trainees were in this category.

Having chosen the field wireman course for the experimental model, the APSTRAT staff designed appropriate materials in two alternative forms. A representative sample of trainees was selected and testing commenced. The results were disappointing. As expected, the brighter and better educated men learned well regardless of the method used. However, those at the opposite end of the scale—largely the Category IV men who were basically the reason for the project—were not measurably benefited by the material thought to be well tailored to their capacities.

Meanwhile, to aid HumRRO in its research, the Army had detailed a small number or cadre of very able technicians to access the content of the experimental course. As part of the process of analyzing the course, each expert trained two men to pass a strict telephone installation performance test. When each trainee passed this test, he was asked to train two more trainees who, in turn, eventually trained two others, and so on.

The results were unexpected. As this HumRRO study[1] explains: "The research staff carried out the experiment for four generations, or to the point where 28 trainees had been trained by other subjects. Every trainee, regardless of aptitude, passed the test, and—what is more startling—the time required for a man to learn the task declined from generation to generation. The training of one student by another—or peer instruction—not only was just as effective as cadre instruction, but was also more efficient in terms of time."

Though these results were both unexpected and exciting, the APSTRAT staff did not abandon its search for a more effective alternative strategy to teach the course. Though peer instruction seemed to offer some advantages, it was at this point viewed as nothing more than a possible additional alternative.

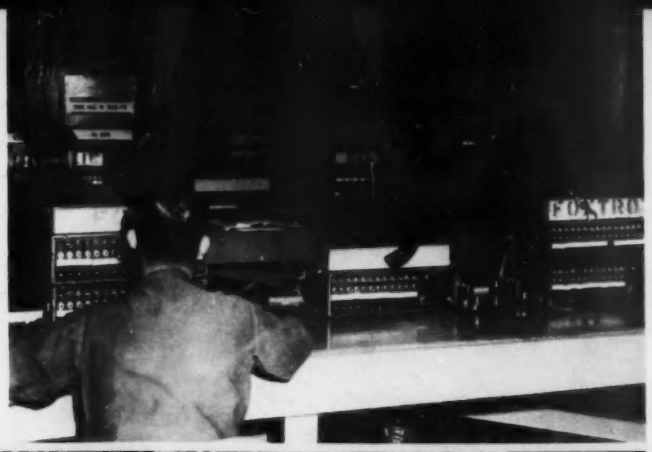
During the first of three experimental tests of the model being developed by APSTRAT, two findings emerged that lead to a radical change in the overall approach. Instead of learning from the mockups and other sophisticated media designed for the course, the trainees invariably preferred to learn from direct "hands on" experience with actual equipment. Further, there was obviously a great deal of informal, unplanned peer instruction going on, and the students continually stressed to the staff the value of such peer instruction to learning.

'Buddy System Is Better'

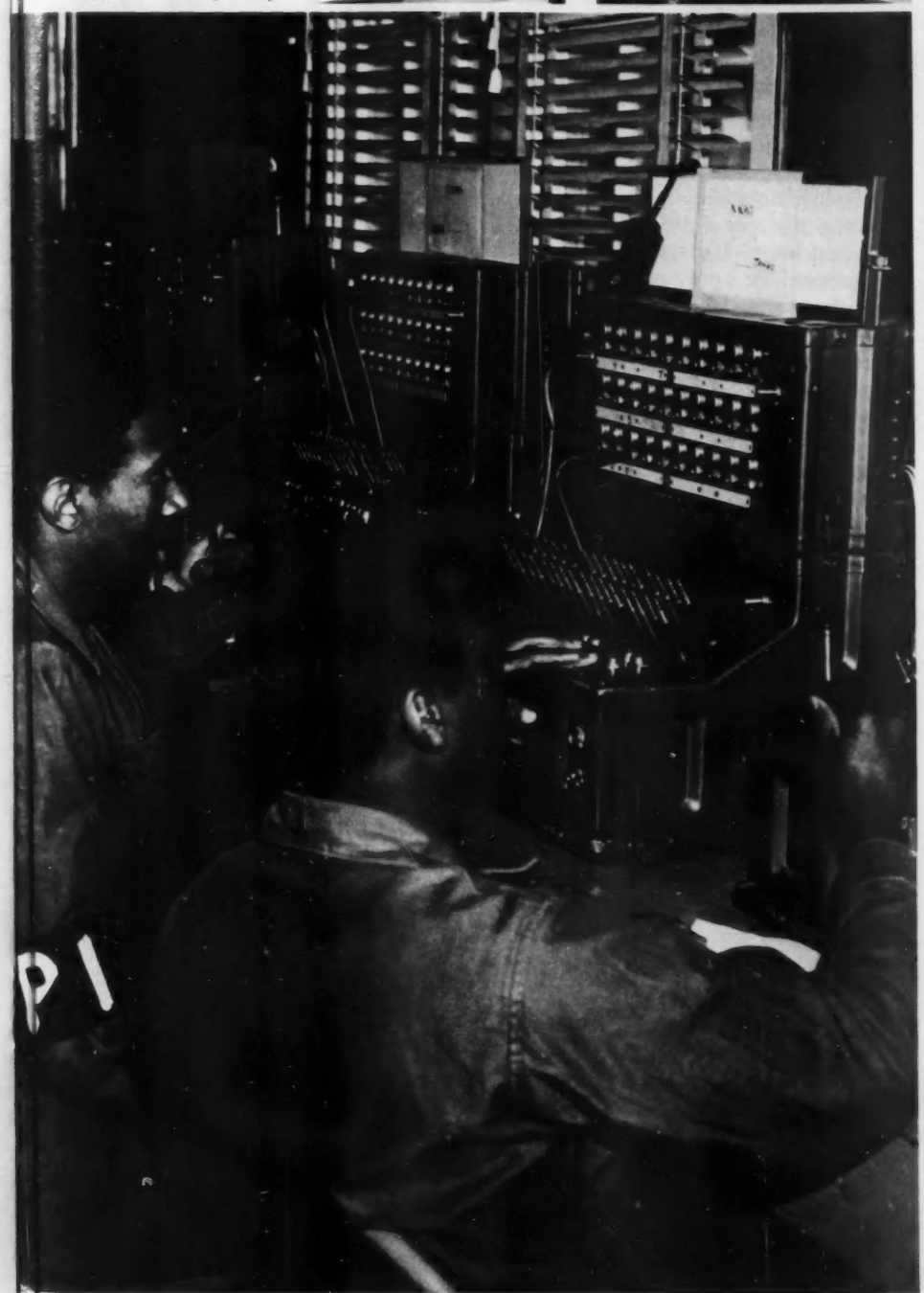
As one trainee put it: "I think the buddy system is better, because over there (at the regular field wireman course) you can't talk to whoever you're sitting by to help you out. You have to raise your hand to ask the instructor, and then the instructor just . . . if you don't listen the first time he doesn't say it again—he doesn't repeat it."

Having discovered a new track, the APSTRAT staff proceeded to develop a method that would employ the peer teaching and performance-oriented method to its fullest potential. This involved creation of a carefully designed training sequence through which the individual would progress. Since the field wireman course consisted of three modules or subcourses, it

[1] *Development and Implementation of a Quality Assured, Peer-Instructional Model* is available for $3 from the Human Resources Research Organization, 300 N. Washington St., Alexandria, Va., 22314. Please specify Technical Report 72-35.



With one instructor and many students (right), communication moves mainly in one direction under the old method of teaching switchboard operation. Two-way communication and immediate feedback are obtained when the same subject is taught using one peer instructor to each trainee (below).



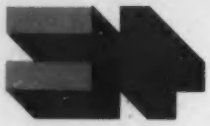
would be necessary for the trainee to pass through three separate and distinct training sequences.

As presently organized using peer instruction, module one of the course includes map reading and land navigation, pole climbing and aerial construction, splicing techniques, field wire construction, and troubleshooting. Module two includes installation, maintenance, and operation of two types of switchboards. And module three includes document distribution; installation, maintenance, radio telephone procedure, and operation of a field radio set; and antijamming techniques.

The training sequence for each of these modules consists of five steps: Observation, skill acquisition, job performance, peer instruction, and course administration.

In the observation phase, under the supervision of a cadre instructor, field wireman trainees watch advanced students perform the job duties in each module. During this phase, learning appears to be proceeding in two directions. The trainee learns by seeing the duties he himself will be performing later. Of at least equal importance, the advanced student is aware that he must know his skill well enough to explain what he is doing and why, and in a way that will enable the trainee to move on to the next sequence. The time devoted to this phase permits the new trainee to observe each task once and often several times.

An important feature of the observation period is that the relationship between observers and job performers is an informal one, allowing for a free flow in normal conversational manner of comments, questions, and answers. A comment by psychologist Alphonse Chapanis on forms of communication in problem solving is worth noting in this regard. Chapanis points out that almost all lin-



guistic and psycholinquistic research today is being done with what he calls "immaculate prose."

"Immaculate prose," he says, "consists of messages that are grammatically pure and correct. . . . These are messages that have been carefully laundered, sanitized, starched, and pressed. Every word, phrase, and punctuation mark has been carefully selected, set into place, and then ironed out firmly on the printed page or writing tablet. It is literally immaculate writing."

On the other hand, Chapanis says, the first reaction to a verbatim transcript of informal voice communication such as that used in peer instruction usually is: "What in the world were they talking about? At first glance, natural interactive communications between people convey the impression that they follow no grammatical, syntatical, or semantic rules. And yet obviously there are rules, for meanings do get across and problems do get solved."

Trainees Praise System

In short, the trainees were learning in their own language and in their own way, a point forcefully made by a soldier who had developed an enormous distaste for the traditional system. Speaking of the model being developed by HumRRO, he said: "You're being taught on the concept of using your own mind, instead of someone else using your mind. I go over there (to the regular field wireman training course), I feel like a damned computer: 'You stand over here.' 'You stand this way.' 'You can't do that.' Now, what kind of thing is that? I'm a human being. I wouldn't even want my family to come up here and see me being treated like that; I'd be embarrased to hell."

The same kind of informal communication continues and intensifies in the next phase, skill acquisition. Now, instead of observing others, the trainee begins to do the job himself. This too has great appeal to the trainees in comparison with the traditional method. "You had something to do all the time, you know, like it was on-the-job training," is the way one trainee characterizes it. "You could get something, grab it, do it, take your test. You had it 'maxed.' "

During this phase the trainee has a single instructor—the student whose job performance he previously observed. When the trainee taking skill acquisition believes he has mastered the skills required to perform a given task, and if his peer instructor agrees with that evaluation, then the cadre supervisor administers a mastery test. As Yasuo ("Ace") Asoka, training instructor supervisor at the Fort Dix, N.J. field wireman course, emphasizes, "This is not a book test. It's a practical test, to see if the man can do it, not write about it."

This practical aspect bears a direct relation to course content. For, by examining a given course from the point of view of practical job skills, much "nice to know" but unessential information often can be eliminated. In many instances the inclusion of such data in a curriculum completely skews course results. For example, it was at one time necessary for field wiremen to know and pass tests on Ohm's Law. Juggling the three elements of that law sufficiently well to analyze electrical series and parallel circuits and pass examinations had no bearing on later success as a field wireman. In practice, there was simply no need to know Ohm's Law to perform the duties of a field wireman.

After passing the first mastery test, the trainee in the skill acquisition phase goes on to the next task in the module, and repeats the process of learning and testing until he has passed tests showing mastery of all the skills required by the module. Should a trainee fail a mastery test, both he and his peer instructor are told where the failure has occurred. The student must then review and practice until he and his peer instructor feel he is ready for retesting. If he fails again, he receives special counseling. A third failure means he is dropped from the course.

When all the mastery tests are passed, the student then moves on to the job performance phase. He is now observed by an incoming student. Job performers operate under conditions as closely related as possible to actual field conditions. No materials or training aids that would not be present on an actual job are available to them.

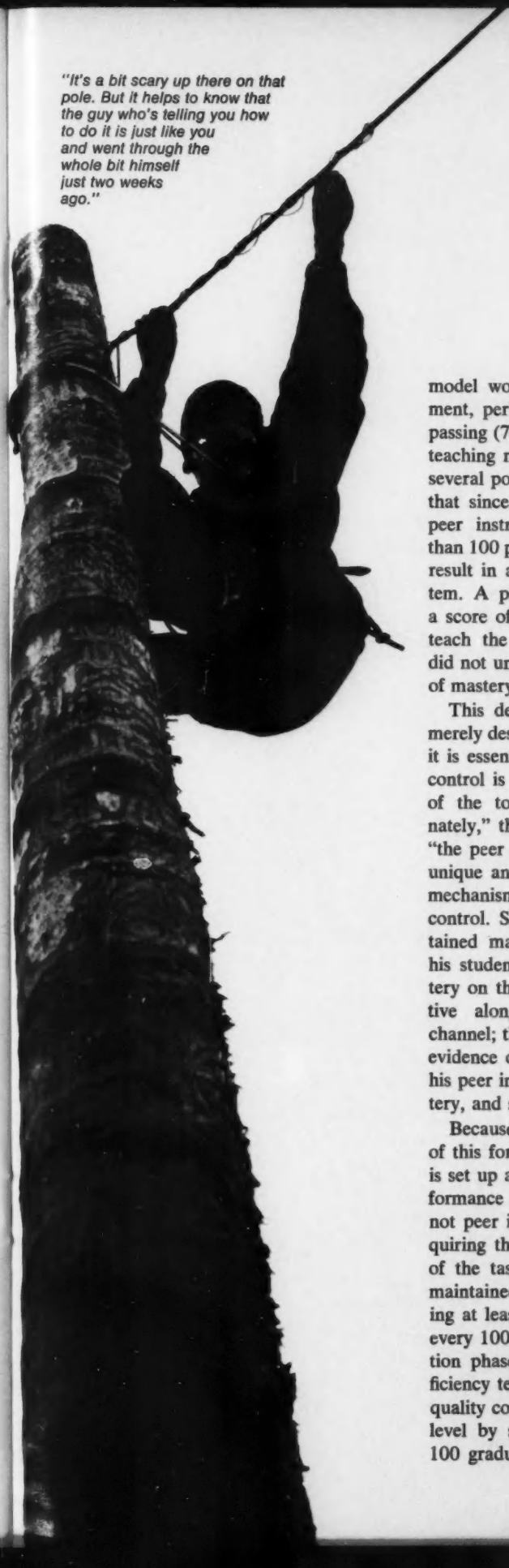
When job performance is completed, the trainee automatically becomes a peer instructor. Each peer instructor is provided with a set of guidelines covering the major job elements to be taught, checklists of necessary equipment, and other relevant data. This material does not tell the peer instructor how to teach. Rather, it serves as a kind of mental aid to assure that no important task or subtask is omitted.

Each Cycle Repeated

After the peer instructor's students pass all the mastery tests, he is ready to move on to the final or course administration phase, where he may be called on to substitute for absent peer instructors, screen students on the mastery tests, and carry out other assigned tasks.

When the student has completed this final phase, he starts the process again as an observer in the next module. Thus, each trainee is called upon to repeat the entire cycle of phases for each of the three modules.

While this system was being developed, an important question had to be considered. What would be the acceptable level of achievement? It was originally anticipated that the peer-instructional



"It's a bit scary up there on that pole. But it helps to know that the guy who's telling you how to do it is just like you and went through the whole bit himself just two weeks ago."

model would raise the level of achievement, perhaps to the point at which the passing (70 in the course using traditional teaching methods) might be increased by several points. However, it soon was seen that since each trainee would become a peer instructor, requiring anything less than 100 percent mastery would inevitably result in a degradation of the entire system. A peer instructor who had gained a score of 90 percent could not hope to teach the 10 percent of the course he did not understand. The appropriate level of mastery would have to be 100 percent.

This demand for total mastery is not merely desirable for this type of approach; it is essential. Therefore, rigorous quality control is required to assure enforcement of the total mastery standard. "Fortunately," the HumRRO report points out, "the peer instructional model possesses a unique and more or less self-maintaining mechanism for assuring vigorous quality control. Since a trainee who has not attained mastery will be unable to bring his student to mastery, evidence of mastery on the part of any student is transitive along an ascending instructional channel; that is, his mastery is *prima facie* evidence of his peer instructor's mastery, his peer instructor's peer instructor's mastery, and so on."

Because it is such an important feature of this form of education, quality control is set up at three levels. There is the performance test level, where supervisors—not peer instructors—administer tests requiring the student to perform each step of the task correctly. Quality control is maintained at the module level by selecting at least five students at random from every 100 who complete the skill acquisition phase and giving them all the proficiency tests of the module. And, finally, quality control is established at the course level by selecting at least five of every 100 graduates and repeating all performance tests. All supervisors are trained to assure uniformity in testing.

After the course was completely developed by the APSTRAT staff, it was gradually phased in at Fort Ord. The results were impressive. The demand for total mastery in the APSTRAT model assured markedly more competent graduates. The academic attrition rate was lower than in the conventional field wireman course, and this lower rate was not gained at the cost of increased recycling. Indeed, the APSTRAT model has a zero recycle rate compared with a 30 percent rate for the conventional course. Finally, for each 3,000-man yearly output of graduates, the APSTRAT system is estimated to cost some $787,000 less than the conventional method.

Use of Method Expanded

These results prompted Col. Ulrich Hermann, chief of the Army Training Center Human Research Unit to describe the course as "outstanding" and to impell the Army to apply the model to field wireman courses at four other installations, to a wheeled vehicle maintenance course, and to various missile maintenance courses. It also is being adapted for use in a cook's course. In addition, the applicability of the method is being studied by a public school in Carmel, Calif.

What precisely is it about the peer instructional method that produced such fine results in the Army, in teaching composition, and in others areas where it has been tried under controlled conditions? It may be assumed that removal of the barrier between student and teacher, and the need to look good and perform well before one's equals are two elements. But in the absence of further research the real nature of the learning dynamics under the model remains what HumRRO calls "a black box": An unknown device that works. □

A Trailblazer Looks Back

by Susan Percy

Carrie Singleton at her desk in the Jacksonville office of the Florida State Employment Service.

7068625953423 3

It wasn't easy to be the only black in the office in 1933 when Carrie Rountree Singleton began her career in the Jacksonville office of the National Reemployment Service, forerunner of the present Federal-State employment service system.

"I was an experiment," she said. "I was a test to see if blacks and whites could work together."

The "experiment" led to a 40-year career. During those four decades Mrs. Singleton saw—and in her own quiet way contributed to—a lot of changes in the relationships between black people and the Florida State Employment Service.

"If it wasn't for her and the way she kept it together, I probably wouldn't be here today," said a young black coworker. "Things have changed tremendously because of people like her."

Mrs. Singleton, who retired at the end of June, admits to some rough spots, but her memories are pleasant.

"I didn't meet with any rebuffs. If there was ever a feeling of resentment toward me, it didn't show. They accepted me and I was just one among the people in the office," she said.

But there were lines, barriers.

When she began work, there were separate entrances for black and white job applicants: Whites used the front door, blacks came in the back way.

She started as a secretary, making $4.50 a week, and retired as an employment interviewer, working the domestics desk. She liked that job best. "I had the opportunity to do more for the people who really needed it," she said.

In 40 years she saw her agency change its attitudes toward blacks and begin to serve them better; in return, the black community came to look more favorably on the employment service.

"Our image has improved greatly within the past few years," she said. "At one time the image was nil—it was very bad. Some blacks used to say that even if you had a college degree the only work you could get at the employment service was as a laborer or a domestic."

Separate entrances and "white only" job opportunities belong now to the past. Mrs. Singleton believes the biggest changes came after passage of the Federal Civil Rights Act in the mid-sixties.

She thinks the Manpower Development and Training Act programs that the employment service administered were especially valuable in establishing credibility among blacks. And she welcomed innovations like the Job Bank's computerized network of job listings and the Job Information Service, which provides employment information directly to jobseekers.

"Things are more out in the open," she said. "Now a person really picks his own job. This makes the employment service more attractive to blacks than when one interviewer had all the professional job listings and another one had all the service jobs. The applicants don't feel that they have to depend on just one person to help them get a job. They can see for themselves what's available."

Of particular satisfaction to Mrs. Singleton is the fact that things are better today for young blacks beginning work in the employment service.

"The picture has changed considerably," she said. "I hope that the blacks who come in now will be able to advance to higher positions," Mrs. Singleton said. "And I believe if they have the ability to do the job, they will be rewarded accordingly. They can expect a better day in the employment service than perhaps I could when I started out."

With modesty that is characteristic of her, Mrs. Singleton credits her successful career to a religious upbringing.

But her role as pathfinder was lauded by one prominent Jacksonville black with this civil rights exhortation: "Take it on, little brother, and take it further. We made the road, you make it better." □

Susan Percy is a staff writer with the Florida Department of Commerce.

Few Major Firms Have Specific Youth Employment Policies

It's said that our society is overly concerned about the young. But how concerned are we when it comes to forging an important link between childhood and adulthood—jobs in which youth can learn the ways of the workplace, build skills, and prepare to support families?

In 1972, the average unemployment rate for 16- and 17-year-olds was 22.7 percent, and the average rate for 18- to 21-year-olds was 14.7 percent. Well over a quarter of all our unemployed are in these age groups. To be sure, teenagers move in and out of the labor force with some frequency, and this helps to keep these rates as high as they are. Still, the rates persist despite a general acceleration in the economy. and they cause concern. Another factor in the youth employment picture is that a declining proportion of high school graduates is going on to college. Presumably, many of these youth are opting for "career education" on the job and thereby swelling their numbers in the labor force.

Patricia Marshall is assistant editor of MANPOWER.

To explore some of the terrain a young person must cross to get a job, the U.S. Department of Labor funded a study of the youth employment policies and practices of U.S. corporations which was made by the Manpower Institute, a private nonprofit program development and research organization in Washington, D.C. In the course of this study, the Institute interviewed executives of 42 large firms located in all parts of the country.

Have employers established policies which affect the hiring of young workers? At the outset of the Institute's study, it was thought this might be one explanation for high youth unemployment. After interviews were held in six cities with personnel officers from companies which represent all sectors of our industrial life, it was clear that corporate policies are neither negative nor positive toward the young. They are simply nonexistent, the Institute says. Moreover, nearly all employer spokesmen assigned low priority in terms of social concern to the job problems of youth. They believed that these problems are put in proper perspective when they are sub-

Corporate Attitudes Toward Young Workers

by Patricia Marshall

Study Finds
Few Major

V5
A
G
7
3
XU

Corporate Attitudes Toward Young Workers

by Patricia Marshall

Study Finds Few Major Firms Have Specific Youth Employment Policies

It's said that our society is overly concerned about the young. But how concerned are we when it comes to forging an important link between childhood and adulthood—jobs in which youth can learn the ways of the workplace, build skills, and prepare to support families?

In 1972, the average unemployment rate for 16- and 17-year-olds was 22.7 percent, and the average rate for 18- to 21-year-olds was 14.7 percent. Well over a quarter of all our unemployed are in these age groups. To be sure, teenagers move in and out of the labor force with some frequency, and this helps to keep these rates as high as they are. Still, the rates persist despite a general acceleration in the economy. and they cause concern. Another factor in the youth employment picture is that a declining proportion of high school graduates is going on to college. Presumably, many of these youth are opting for "career education" on the job and thereby swelling their numbers in the labor force.

To explore some of the terrain a young person must cross to get a job, the U.S. Department of Labor funded a study of the youth employment policies and practices of U.S. corporations which was made by the Manpower Institute, a private nonprofit program development and research organization in Washington, D.C. In the course of this study, the Institute interviewed executives of 42 large firms located in all parts of the country.

Have employers established policies which affect the hiring of young workers? At the outset of the Institute's study, it was thought this might be one explanation for high youth unemployment. After interviews were held in six cities with personnel officers from companies which represent all sectors of our industrial life, it was clear that corporate policies are neither negative nor positive toward the young. They are simply nonexistent, the Institute says. Moreover, nearly all employer spokesmen assigned low priority in terms of social concern to the job problems of youth. They believed that these problems are put in proper perspective when they are sub-

Patricia Marshall is assistant editor of MANPOWER.

sumed under other categories—particularly those of minority groups, the disadvantaged, and women.

The surveyed firms employ more than 1.8 million workers. How many of these are young workers could not be determined accurately because some employers did not have data broken out by age. The greatest concentrations of youth appeared to be in banking, insurance, utilities, and retail sales, and only negligible numbers in mining, contract construction, manufacturing, and real estate.

Most of the young workers are 18 to 21 years old, the employers indicated. There are relatively few 16- and 17-year-olds in corporate employ, and generally they are hired in conjunction with formal education or training programs.

The Institute first sought to determine the extent to which corporations base their youth employment policies on any studies regarding the job performance characteristics of youth. A majority of the firms regularly collect and analyze detailed information on absenteeism and turnover, the Institute learned. Typically, they do not break down such information by age. And only one corporation, which had a disproportionately high turnover rate among 20- to 23-year-olds, was thinking about relating its hiring policies to data of this kind. It does not necessarily follow that all of the other companies are making irrational hiring decisions, the Institute cautions. Subjective evaluation by individual firms may reflect accurately their past experience with young workers.

The Institute also found that studies of young workers that have been made outside corporate metes and bounds are few in number and disparate in quality and kind. What's more, corporation executives were rather dubious about the usefulness to them of studies which are national in scope or pertain to industries other than their own.

Hiring Decisions Decentralized

Yet there is "a significant sharing of information—both aggregate and anecdotal—within the community of corporate employers," the researchers found. Personnel officers exchange information about their youth employment experiences. In addition, information gleaned from the press and from professional journals was familiar to the people who were interviewed. To the extent that policy and practice are predicated on attitudes and subjective evaluation, the Institute says, such information has some effect on hiring decisions at all levels within the business structure.

When the Institute probed further into the lack of any specific corporate policies toward young workers, it found that employment policies generally are not established for categorical groups, except in the case of persons affected by equal employment legislation or who are in publicly supported on-the-job training programs. One internal factor working against setting up "pro youth" employment policies is that hiring decisions are highly decentralized and corporate personnel offices have only limited supervision and control over them. This is particularly true in multidivision firms whose operations span more than one State.

Other employer attitudes which surfaced during the interview sessions seem to circumscribe further the number of jobs available to the young. There was widespread acceptance among the corporate spokesmen of the "labor queue" concept, with youth standing at the very end of the hiring line. Employers supported this view of youth's place by asking why they should hire young people if doing so excludes older workers who have greater responsibilities and are "likely to be more skilled, stable, and productive."

These views also were expressed frequently by corporation executives to the Institute staff:

Young Workers

Our commitment
to youth employment and
involvement with
the schools runs hot
and cold, and is rather
directly related to our
manpower needs.

• The hiring of young workers is affected primarily by local labor market conditions, and not by such factors as productivity, rates of turnover, and the like. When conditions tighten, industry will hire deeper into the lesser skilled labor force, where youth are concentrated. One employer said: "Our commitment to youth employment and involvement with the schools runs hot and cold, and is rather directly related to our manpower needs."

• Much youth unemployment can be accounted for by students seeking part-time work and by new entrants to the labor force. Therefore, employers argued, the problem is not as critical, and solutions are not as compelling, as the data on youth unemployment may suggest.

• Unemployed youth are always with us. If the problem gets more acute when the economy falters, that's only to be expected since young workers have less to offer. (However, when the economic situation improves, youth do not necessarily benefit, it appears. Company spokesmen reported that there has been little increase in hiring despite the recent business upturn.)

• Industry cannot be expected to impair earnings by hiring more youth simply because their unemployment rate is high. More will be hired if they become competitive with adult workers in terms of productivity and costs.

• Youth have highly inaccurate ideas about the world of work. The executives find that young workers, when compared with adults, are less disciplined in basic work etiquette, change jobs more often, are more militant, and have higher rates of absenteeism. Increasing numbers fail to have basic literacy, communications, and mathematics skills.

• Youth are more likely to advocate or to accept labor union representation and are more likely to push for immediate wage gains rather than for long-term security benefits.

• The energies of personnel managers are much taken up with identifying, recruiting, placing, and promoting minorities and women. To this is now added an active concern for hiring veterans. In several firms, all new hiring was restricted to one or more of these three worker categories.

• The disadvantage of youth is self-correcting with time, while that of other groups represents a special social responsibility. If youth are to acquire an equal status with these other groups, company spokesmen added, they must be as well organized and as vocal.

Despite such views, which significantly affect employment opportunities for youth, many employers are actively working to upgrade the employability of youth in their areas, largely through cooperation with local school systems, the Institute notes. Their activities include corporate participation in distributive education programs, onsite apprenticeship training, school adoption programs, and school board membership.

The businessmen frequently cited work restrictions in Federal and State statutes as the chief reason that more youth under 18 are not hired for certain jobs, especially in manufacturing industries.

"The child labor regulations seem to impact in several ways," the Institute reports. "They prohibit the employment of minors under 18 in certain work; they create additional administrative work; and their punitive provisions tend to dissuade employers." The Institute also detected employer uncertainty about the regulations, which it attributed to differences among the Federal and various State statutes.

In some instances, employers were setting up age requirements for jobs over and above those of the States—whose child labor statutes, the Institute notes, are considerably more complex and often more stringent than Federal regulations. Employers said their actions are based on in-plant assessments of hazards in particular jobs or the difficulty they have in controlling in-plant movement from one area to another.

The Institute sees a need for a more extensive review of State laws. It also believes these laws should be standardized and simplified and clearly explained to employers.

Study Finds No Easy Solutions

Summing up its findings, the Institute could see no easy, ready-at-hand solutions to the employment problems of youth. There is a relatively adequate supply of older, more skilled labor in most categories. Increasing technological development and economic pressures to increase productivity weaken demand for low-skilled workers. Corporate employment policies already give high priority to needs to expand and upgrade job opportunities for other population groups, and it is difficult to give still one more group this status.

Still, there are some longer term considerations which the Institute sees as a possible countervailing force. More employers express concern about the changing attitudes of the young toward work. They also are concerned that a large number of entry-level jobs—in which youth are concentrated—cause absenteeism and turnover because these jobs are monotonous and offer little or no career development.

Recently, there has been greater recognition of the extraordinary business costs involved in training workers. This may spur cooperative efforts of industry and schools to improve the career education of youth and ease youth's transition from school to work. □

V
8
5
A
C
3
7
XU

Words & Figures

Placements of Vietnam-Era Veterans

The unemployment rate of Vietnam-era veterans 20 to 29 years of age was 5.9 percent in March, marking the seventh straight month in which there was no significant difference in the unemployment rates for veterans and nonveterans of the same age group. A year earlier, the unemployment rate for Vietnam-era veterans in the 20–29 age group was 8.4 percent compared with 7.4 percent for nonveterans.

Total employment among Vietnam-era veterans 20–29 years old increased by 283,000 between March 1972 and March 1973. Part of this improvement is attributable to stepped-up business activity as reflected in a general reduction in unemployment and an upturn in employment. But there also were special factors at work for veterans.

In June 1971, when the unemployment rate for Vietnam-era veterans 20–29 years old was 8.8 percent, almost 2 percentage points higher than for nonveterans, the President's Veterans Program (PVP) called for an intensification of efforts by the business community and government agencies. As part of this effort, the PVP assigned goals for placements in jobs and training. The data through March 1973 show that the major objectives for fiscal year 1973—which ended June 30—were being met or surpassed.

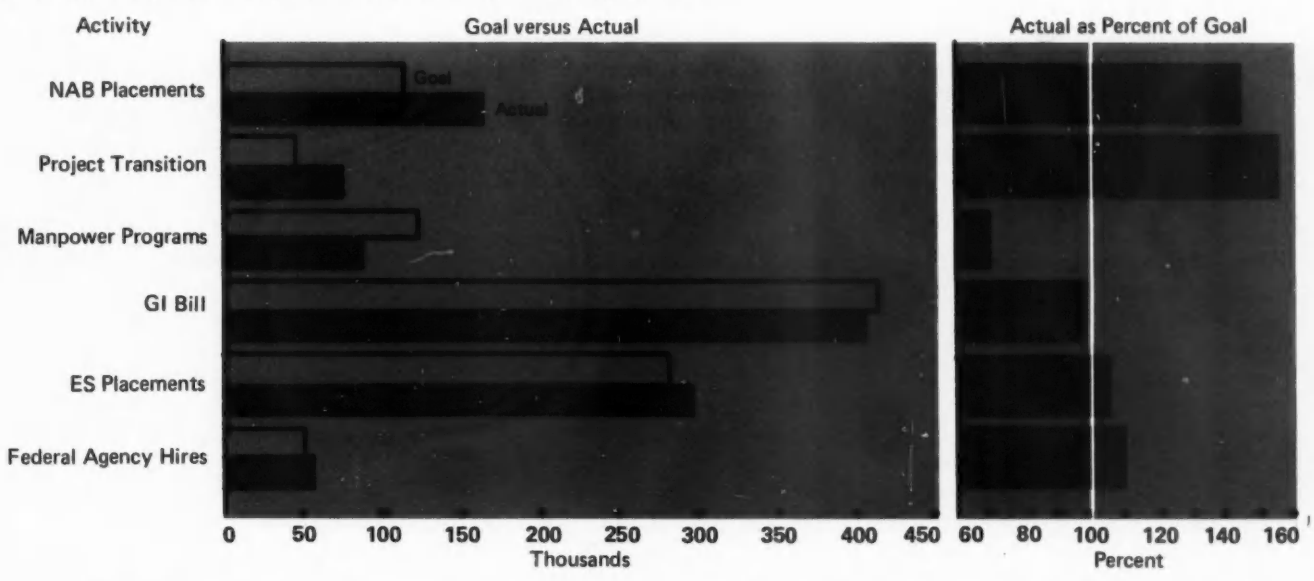
As of March, the National Alliance of Businessmen had placed more than 162,000 veterans in private industry jobs, thus exceeding in the first three quarters of the fiscal year the organization's goal of 150,000 for the full year.

The Department fo Defense's Transition Program, which provides training, counseling, and other services to military personnel who are soon to be discharged, had enrolled 76,000 servicemen by the end of March, compared with a goal of 65,500 for the full year.

Goals for training opportunities in manpower programs and enrollments in college or vocational training under the GI bill were set at 166,000 and 510,000, respectively. There were 404,000 GI bill enrollments compared with the planned goal of 410,000 for the 9-month period ending in March. Enrollments in manpower training programs, which were affected by a temporary freeze, totaled 87,000 at the end of March.

To meet its goal, the public employment service had to place 284,000 Vietnam-era veterans by the end of March. It had placed 299,000.

President's Veterans Program --Fiscal Year 1973 Through March



Charlie May Sharp thoroughly enjoys teaching at New Brunswick High School, where she was once a student.

Youth Corps Launches Teaching Career

For Charlie May Sharp, the Neighborhood Youth Corps (NYC) was the means of getting out of a world bounded by poverty and into an orbit where there were other worlds to choose from.

The one she picked was education. Mrs. Sharp, now a business studies teacher at New Brunswick (N.J.) High School—the same school she graduated from—joined NYC when she was a senior. One of five daughters of a machinist who had been laid off his job, she got an NYC stipend to work after school hours as clerical aide to the superintendent of schools. That experience started her toward regular employment, first as a summer replacement in the same office, and then as a secretary to Felicia Feinswog, principal of Bayard Elementary School.

During 4 years at Bayard, the ex-NYCer (she was then Charlie May Bivins) learned that being a teacher could be an exciting and satisfying job. But upon deciding to teach business skills rather than practice them, she found college costs a major stumbling block. At this point, Miss Feinswog suggested coping with the problem by continuing to work and going to school at night. And when it turned out that enrollments had just closed at the school of Charlie May's choice, Rutgers University, Miss Feinswog persuaded Rutgers to take one more student. For a year, Charlie May Bivens went to this university's night classes and earned a semester's credits.

The next year, she became a full-time student at Rider College in Lawrenceville, N.J., this time paying college costs with a student loan. She was now sure of herself and knew that teaching was within her reach. After getting her B.S. from Rider with a major in business education, she returned to her old high school to teach general business studies, business math, and economic geography to freshmen and sophomores.

Mrs. Sharp, who is married to the assistant to Rutger's dean of student affairs, says she loves working with youngsters who, for the most part, do not plan to go to college and are seeking careers in the business world. She describes herself as "a pusher for business studies." In addition, she is a pusher for education. She persuaded her four sisters that they, too, could succeed in college. All are going to Rutgers, one as a daytime student and the others in night school. As for herself, she wants to continue teaching and perhaps someday go back to school to work on a masters in business education.

NYC, she says, only got her started toward her career. But she points out that this start was critical. Without it, the Bivens sisters might never have shown the world what they can do. □

Book Reviews

Roadmap to a Payroll

The College Graduate Guide to Job Finding

by Arthur R. Pell

Simon and Schuster, New York, 1973. 100 pages, $2.45 (paper).

"Seek and ye shall find" is the advice most often given to persons looking for a job. In this book Arthur R. Pell expands—and refines—this "seeking" process. In a few hours of easy-reading time, Pell advises on selecting a career, preparing for the job search, boning up on interviewing techniques, what to expect as a job applicant, beginning on that first permanent job, and deciding whether to leave it.

Pell writes primarily for the college graduate and stresses the job sources available right on campus. He explains how to use these sources—including how to dress, what questions to ask, what not to say, and what to expect from the type of recruiter who is doing the interviewing (something most students learn through the grapevine). In times of tight job markets, the college placement office, too, has trouble locating jobs—and representatives of private industry curtail their recruiting visits. But a college student will still find some jobs listed with the placement office, and recruiters still come, even to find one or two qualified employees.

Pell hints that industry recruiters are looking for a particular applicant for a particular job, and students who have technical or specialized training usually have a wide selection of jobs. He points out that these representatives cannot spend their time on the campus counseling on careers, convincing the undecided, or searching out prospects still in the dormitory. If they want a student with high grades, they will select from the applicants who demonstrate their interest by coming to the interview.

To be prepared for these interviews, Pell recommends that students have their job choices narrowed down. It is preferable to have this done by the time the student enters college, but too often this decision is influenced by the pressures of college curriculums and a process of elimination during matriculation. For the student who is still unsure of the career path he wants to follow, this book leaves no stone unturned on where to get help in making a choice—whether from college counselors, public and private guidance experts, or workers in fields the student might be attracted to.

In addition to campus sources of job information for students, the book also lists sources available to all jobseekers. Even the more obscure ones are discussed, such as want ads in technical journals, directories of businesses, and situation wanted ads. We've all heard of the more enterprising jobseekers who write for jobs to companies that advertise in technical journals or to companies on, for example, the *Fortune* 500 list. Most jobseekers, however, will find this book helps them uncover new leads.

To make the leads pay off, Pell offers innumerable hints and strategies that directly affect the success of a job search. For example, after taking a personal skill inventory and writing a resume stressing significant accomplishments and history, the applicant is directed to select the particular point—a skill, pertinent work experience, or proven aptitude—that singles him out as particularly suited for the particular job he is applying for. Pell also advises applicants to investigate the company on several factors and offers samples of the job tests they might face. Other informative sections cover how to follow up the job interview without being a pest, what to expect in terms of training when the job is started, and descriptions of jobseekers employers do not want to hire.

All this may sound like a Pandora's box of jobseeking advice, but it is tied together so that by the end of the book the reader has a pretty good idea of what is ahead, how to get started, and how to keep moving toward getting a job. Being prepared not only is the basis for successful job search, it also makes the seeking a bit more bearable.

Ruth Shimonkevitz

Timely Emphasis

Employment of the Middle-Aged: Papers from Industrial Gerontology Seminars

Edited by Gloria M. Shatto

Charles C. Thomas, Springfield, Ill., 1972. 224 pages, $11.50.

These papers were prepared for two seminars in industrial gerontology funded by the Manpower Administration through the Minnesota Department of Manpower Services. About a score of contributors, most of them long identified with the field of aging, are represented here by papers of differing depth and scope—varying from a three-page note on income, leisure, and productivity by Leon Greenberg, associate commissioner of the Bureau of Labor Statistics, to a rather difficult, closely reasoned chapter on "Age and Capacity Devaluation" by Laurence Haber, director of disability studies for the Social Security Administration.

One or more of the papers has appeared elsewhere; others report studies still underway, including *Withdrawal from the Labor Force by Middle-Aged Men 1966-7*, which is part of a 5-year longitudinal study financed by the Manpower Administration and directed by Herbert S. Parnes of Ohio State University's Center for Human Resource Research.

Although they are technical, the sections on psychological data and the implications for counseling and on age and capacity are well worth at least skimming by counselors and others serving older workers. In the first chapter on contributions of the social sciences to industrial gerontology, Harold Sheppard draws on his own extensive knowledge of the subject and on a number of other sources to highlight in brief and highly readable style some problems and misconceptions about employment of the aging. Charles E. Odell, deputy associate administrator of the U.S. Employment Service, in the final chapter, reviews the Manpower Administration's recent efforts to deal with the employment problems of the middle-aged.

There are nuggets of fact and insight scattered among the various papers. For example, Sidney Cobb, a physician on the staff of the University of Michigan, and Stanislav Kasl of Yale report on preliminary findings from a study of the medical aspects of unemployment on laid-off employees of shutdown auto plants. The study focused on married men aged 40 to 49 and indicated that unemployment was linked to rises in blood pressure and changes in levels of uric acid and cholesterol that were equivalent to 10 years of aging. Economics professor Monroe Berkowitz of Rutgers lays to rest the fiction that hiring older workers raises workmen's compensation insurance rates.

The emphasis in this volume on the middle-aged worker, rather than on those of retirement age, is particularly useful at this time. The recent substantial improvements in social security significantly strengthen the situation of those already retired. On the other hand, as the editor points out: "To have adequate retirement income, middle-aged persons must have employment opportunities; thus, the years after age 45 are crucial." And, of course, one must live during those preretirement years.

Louis H. Ravin

The Reviewers

Ruth Shimonkevitz is a U.S. Department of Labor information officer in Denver.

Louis Ravin is a manpower development specialist with the Manpower Administration's Office of Policy Evaluation.

Publications

Following is a selected list of publications on manpower and related matters. Single copies of publications for which no price is indicated can be obtained free by writing or telephoning the appropriate organization at the following addresses: Manpower Administration, U.S. Department of Labor, Washington, D.C. 20210; Bureau of Labor Statistics, U.S. Department of Labor, Washington, D.C. 20212. Please enclose a self-addressed label with all requests for free publications. For publications not available free, write the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402, and enclose payment.

The Employment Service—Forty Years of Progress

Manpower Administration booklet gives brief account of the many and varied changes which have occurred in the growth of the United States Employment Service in the 40 years since it was created by the Wagner-Peyser Act in 1933.

National Pattern Standards of Apprenticeship and Training for Electricians

Manpower Administration booklet details standards developed by the Associated Independent Electrical Contractors of America, Inc. to provide the basis for comprehensive programs of on-the-job training and classroom job-related education leading to graduation of fully qualified journeyman electricians.

National Apprenticeship Standards for the Retail Meat Cutting Industry

Manpower Administration booklet details the national apprenticeship standards for the retail meat cutting industry developed by the Amalgamated Meat Cutters and Butcher Workmen of North America, AFL-CIO, and participating retail employers. These standards are recommended as a guide by management and labor locally to institute joint apprenticeship committees and develop apprenticeship programs to meet needs of retail meat cutting industry.

Public Employment Program—Annual Report to Congress

Manpower Administration booklet details activity following signing of the Emergency Employment Act on July 12, 1971 which resulted in the employment of almost 169,000 people by the end of June 1972.

Employment Services to Veterans—A Year of Action

Manpower Administration historical report for fiscal year 1972 of services for veterans by the U.S. Employment Service, its Veterans Employment Service, and its affiliated State employment services, and other public and private organizations.

Selected Books and Monographs From the Research and Development Program

Bibliography lists selected books and monographs resulting from the research and development program of the Manpower Administration. These selections should appeal to planners, policymakers, administrators of manpower programs, students, and academicians who must concern themselves with some of the broader aspects of the manpower field.

The WIN II Program—A Way for Everyone to Win

Manpower Administration pamphlet describes the Work Incentive (WIN) II Program with emphasis on new features that give it a better chance to help welfare recipients move into productive jobs. Discusses work requirement and work incentives for people on welfare and the new incentives for employers.

How the Government Measures Unemployment

Bureau of Labor Statistics pamphlet answers some frequently raised questions about who is counted as unemployed and describes the way in which unemployment is measured. Provides background for appraising developments in area of unemployment. Specify BLS Report 418.

Dual Careers, Volume 2

Second Manpower Administration report on a 5-year study of labor market behavior of women in U.S. who were 30 to 44 years of age in 1967. Summarizes some findings of second round of interviews with these women during early summer of 1969 and responses to mail questionnaires in 1968. Intended to describe magnitude and patterns of change in the labor market status of women during the 2-year period between interviews. Specify Manpower Research Monograph No. 21. $2.10.

Series on Education and Jobs

Bureau of Labor Statistics series of five leaflets on jobs selected from the *Occupational Outlook Handbook* and the types of education which they require. Also gives employment opportunities and trends to 1980.

Jobs for Which Apprenticeships Are Available

Jobs for Which a High School Education Is Preferred, But Not Essential

Jobs for Which a High School Education Is Generally Required

Jobs for Which Junior College, Technical Institute, or Other Specialized Training Is Usually Required.

Jobs for Which a College Education Is Usually Required

Union Wages and Hours—Grocery Stores, July 1, 1971

Summarizes results of Bureau of Labor Statistics first biennial survery of union wage rates and straight-time hours of work for grocery store employees in 68 cities, as provided in labor-management agreements. Specify BLS Bulletin 1772. $1.50.

Publications of the Bureau of Labor Statistics—January-June 1972

Bureau of Labor Statistics catalog of publications released January-June 1972. Contains annotated listings by subject and region, and those which are for sale or free and those which are available on microfiche.

Labor Law and Practice in Foreign Countries

Two in a Bureau of Labor Statistics series providing background material for U.S. businessmen and others employing local workers abroad, trade union and labor specialists, consulting economists, and students.

The Philippines, Specify BLS Report 403. $1.25.

Colombia. Specify BLS Report 408. $1.25.

Directory of Labor Organizations in Brazil

Bureau of Labor Statistics directory of labor organizations in the Federal Republic of Brazil as of early 1972. Revises information on Brazil in *Directory of Labor Organizations —Western Hemisphere,* published in 1964.

Wage Calendar 1973

Bureau of Labor Statistics bulletin gives statistical information identifying major situations by company and union in which, during the year, contracts will terminate, deferred wage increases will become due, changes in the Consumers Price Index will be reviewed, and contracts will reopen. Data are timely indicators of movements that might be expected in the economy. Specify BLS Bulletin 1766. 75 cents.

The Foreign Medical Graduate: A Bibliography

National Institutes of Health 100-page bibliography provides a center for the exchange of information on international health manpower. Focus is on the foreign medical graduate in the United States. Citations deal with this subject from several perspectives, including education of foreign medical graduates abroad, the flow of foreign medical graduates to the United States, and their training and use in American medicine. Each entry has been indexed by authors, keywords describing the content of the citations, and keywords in the title of the citation itself. Specify DHEW Publication No. (NIH) 73-440. $1.75.

☆ U.S. Government Printing Office 1973: 512-311/16

man·pow·er (man′pou′ĕr) -people, jobs, poverty, employment and unemployment, transportation, education, economics, housing, training, health services, upgrading, apprenticeship, research.

A complete definition of manpower would have to include all this—and more. And all of these topics—and more—are covered in MANPOWER, the prize-winning monthly journal of the U.S. Department of Labor's Manpower Administration that keeps you informed the year-round on manpower and anti-poverty policies and programs. For a searching look at what's happening in manpower, and why, through the eyes of experts from the academic community, business, and Government, subscribe to MANPOWER.

Enclosed find $_____(check or money order payable to Superintendent of Documents).

Please enter my subscription to MANPOWER Magazine for one_____two_____or three_____ years. ($5.50 a year; $7.00 if mailed to a foreign address.)

NAME – FIRST, LAST

COMPANY NAME OR ADDITIONAL ADDRESS LINE

STREET ADDRESS

CITY | STATE | ZIP CODE

Mail this order form with payment to: Editor, MANPOWER Magazine, U.S. Department of Labor, Washington, D.C. 20210

manpower—word of many meanings

man·pow·er (man′pou′ĕr) -people, jobs, poverty, employment and unemployment, transportation, education, economics, housing, training, health services, upgrading, apprenticeship, research.

A complete definition of manpower would have to include all this—and more. And all of these topics—and more—are covered in MANPOWER, the prize-winning monthly journal of the U.S. Department of Labor's Manpower Administration that keeps you informed the year-round on manpower and anti-poverty policies and programs. For a searching look at what's happening in manpower, and why, through the eyes of experts from the academic community, business, and Government, subscribe to MANPOWER.

Enclosed find $_____(check or money order payable to Superintendent of Documents).

Please enter my subscription to MANPOWER Magazine for one_____two_____or three_____ years. ($5.50 a year; $7.00 if mailed to a foreign address.)

NAME – FIRST, LAST

COMPANY NAME OR ADDITIONAL ADDRESS LINE

STREET ADDRESS

CITY | STATE | ZIP CODE

Mail this order form with payment to: Editor, MANPOWER Magazine, U.S. Department of Labor, Washington, D.C. 20210

UNITED STATES
DEPARTMENT
OF LABOR
MANPOWER
ADMINISTRATION
WASHINGTON, D.C. 20210

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

U.S.MAIL
POSTAGE AND FEES PAID
U.S. DEPARTMENT OF LABOR
FIRST CLASS MAIL
LAB-441

How do corporations view young workers? Do they facilitate their employment, or are they hesitant to hire young people? If corporations have specific policies on young workers, are these policies based on any studies of the job performance of youth? The answers to these and similar questions were sought in a study for the Department of Labor. For a report see *Corporate Attitudes Toward Young Workers* in this issue of MANPOWER.

XU

UNITED STATES
DEPARTMENT
OF LABOR
MANPOWER
ADMINISTRATION
WASHINGTON, D.C. 20210

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

U.S.MAIL
POSTAGE AND FEES PAID
U.S. DEPARTMENT OF LABOR
FIRST CLASS MAIL
LAB-441

How do corporations view young workers? Do they facilitate their employment, or are they hesitant to hire young people? If corporations have specific policies on young workers, are these policies based on any studies of the job performance of youth? The answers to these and similar questions were sought in a study for the Department of Labor. For a report see *Corporate Attitudes Toward Young Workers* in this issue of MANPOWER.

XU